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The Journal

South Carolina Medical Association

VOL. XXIV. GREENVILLE, S. C., JANUARY, 1928 CONTENTS EDITORIAL DEPARTMENT: The Columbia Meeting, April 17th, 18th and 19th, to be a Record Breaker Sim's Memorials, Woman's Auxiliary and Medical College Interested_____ The Marlboro Medical Society Holds Great Meeting The South Carolina Pediatric Society ORIGINAL ARTICLES: The Acute Abdomen in Infancy and Childhood, by T. H. Grimball, M. D., Greenville, S. C. ----Some Observations Concerning So-Called Nasal Catarrh, by Theo. Quattlebaum, M. D., Columbia, S. C. An Abstract from the Sim's Memorial Address on Gynecology, by Dougal Bissell, M. D., Consulting Surgeon to the Woman's Hospital of New York ______ Fractures-Essentials of Treatment and Management, by Wm. A. Boyd, M. D., Columbia, S. C. 11 UROLOGY WOMAN'S AUXILIARY SOCIETY REPORTS ____ MEDICAL RESERVE CORPS

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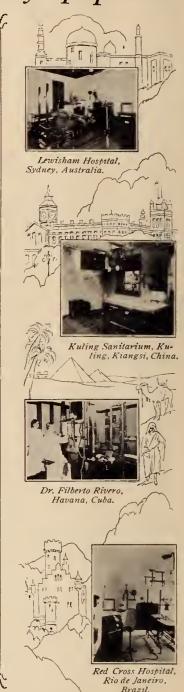
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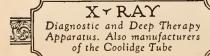
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OF THE

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EDITORIAL

THE COLUMBIA MEETING, APRIL 17TH, 18TH AND 10TH TO BE A RECORD BREAKER

Plans are now well along looking to the complete success of the annual meeting to be held at the Capital of the State this year. On Friday, January 13, the Scientific Committee consisting of Dr. William Weston, Chairman, Dr. J. H. Cannon, Charleston, Dr. F. B. Johnson of Charleston, Dr. D. L. Smith, President and the Secretary held a meeting and outlined the program. The number of papers will be limited to twenty five. Periodic Health Examinations will be stressed. Certain phases of obstetrics and pediatrics will be given a prominent place with a view to lowering infant and maternal mortality in South Carolina. There will be a large number of clinics. There will also be a special attempt to put on the most

extensive commercial and scientific exhibits we have ever had. Golf will come in for its share of attention. The entertainments will be ample without interfering with the scientific procedure. The Jefferson Hotel has been selected as Headquarters. A large number of special committees have been appointed by the Columbia Medical Society to act under the general leadership of Dr. Marion H. Wyman, Chairman. The Woman's Auxiliary of the Columbia Medical Society is a splendid organization of very active members and will cooperate in the entertainment of the Association. The South Carolina Public Health Association will meet at the same time and place as will the South Carolina Pediatric Society and other organizations. The Anderson meeting registered more than five hundred so that it would appear to be within the bounds of reason to expect six hundred or more at Columbia.

SIM'S MEMORIALS, WOMAN'S AUXIL-IARY AND MEDICAL COLLEGE INTERESTED

South Carolina is at last fully aroused to the privilege the life and works of J. Marion Sims the great Surgeon born at Lancaster offer as an incentive to the oncoming generations to emulate. For twenty years the State Medical Association has had under consideration ways and means for erecting a monument on the State House grounds as originally suggested by Dr. S. C. Baker of Sumter, President at the time of the Association. The Association did little, however, toward consummation of the end in view. At the Sumter meeting 1926, the Woman's Auxiliary decided to take up the proposition and with the cooperation of the State Medical Association secure the money to erect the monument. We are delighted to publish a list of contributors to the fund in this issue of the Journal and to voice our admiration of the splendid work of the Woman's Auxiliary in this connection. The monument is now practically assured.

The life of Sim's, however, was so world wide in its beneficence that there is little danger of overdoing the homage due him. The Board of Trustees of the Medical College of the State of South Carolina adopted a resolution on January 4, 1928, which we are glad to publish and also the letter sent out to the profession by the Dean. The Journal unqualifiedly endorses the movement and urges the

members of the State Association to write immediately to their representatives in the Legislature and request their support of the appropriation asked for by the College.

THE MARLBORO MEDICAL SOCIETY HOLDS A GREAT MEETING

One of the classic events of South Carolina medicine was that of the special annual meeting and banquet, January 12th, of the Marlboro Medical Society. They had one of the finest programs this year ever held in the State by any County Society. Incidentally, Marlboro has set the pace for the erection of county hospitals under the cooperation of the Duke Fund. A recent campaign assures one hundred thousand dollars for this project. The profession of South Carolina will rejoice with the citizens of Marlboro over the extraordinary spirit manifest there for the relief of suffering humanity.

THE SOUTH CAROLINA PEDIATRIC SOCIETY

One of the vigorous medical societies of the South is that of the South Carolina Pediatric Association which held its meeting, January 13th, under the Presidency of Dr. Williams Bailey of Spartanburg. A new Constitution and By-Laws were adopted, the Society reorganized, and now efforts will be made to increase the membership and extend its influence.

ORIGINAL ARTICLES

THE ACUTE ABDOMEN IN INFANCY AND CHILDHOOD*

By I. H. Grimball, M. D., Greenville, S. C.

In dealing with this subject, I have tried to cover only the main points in the symptomatology and diagnosis of these fairly frequent emergencies met with, and have left the matter of treatment entirely to the surgeons. My reasons for presenting a paper of this type to you, is due to two very important facts: first, the frequent occurrence of the acute abdomen in infants and children, and second, the necessity of an early and accurate diagnosis. According to Herzfeld, (1) "inflammation proceeds into suppuration and obstruction into symptoms of toxemia very rapidly in early life."

Two distinct classifications will be taken up and these are: first, the inflammations, and second, the obstructions. The age of the patient has a definite bearing on these two types, for with a few exceptions, we are apt to find the obstructive lesions in the infants, and the inflammatory lesions in the older children. An exception to this however, is the occurrence of pneumonia and streptococcic peritonitis in the newborn. Of course, strangulated hernia may occur in the older children as well as acute appendicitis.

In taking up the inflammations, we would naturally place acute appendicitis first. Its occurrence has been frequent and troublesome enough to call for numerous papers by leading pediatricians and surgeons, and all agree that after the fifth year of life, it is the most common of the acute abdominal lesions.

The causative factors are practically the same as in adult life, and in addition, Howland (2) has called attention to the part played by trichocephalus trichiura.

hibits. According to Bolling (3), the order of their value, is as follows: "local tenderness

intestinal parasites, especially oxyuris and Symptomatology: Only a few of the cardinal symptoms will be taken up as time prowith or without muscular rigidity, pain, vomiting, elevation of temperature and leukocytosis." The elicitation of the first three depends largely on the age of the patient, but with patience and persistence, they usually can be determined even in the very young. Vomiting is nearly always present, either at the onset or throughout the whole course. The height of the temperature or the leukocytosis have no relation to the severity of the attack.

One has always to bear in mind the exclusion of pneumonia in making a diagnosis, but one author has stated "that it is better when in doubt, to operate and find a normal appendix than to delay and find the abdomen full of pus."

The second inflammatory lesion that will be taken up, is Pneumococcic and Streptococcic Peritonitis, occuring chiefly in the new born. It is due to infections of the umbilicus and umbilical veins, and also follows upper respiratory infections. There is one very severe type described in recent literature, as due to the haematogenous streptococcus which occurs usually in young girls; the infection taking place by extension up from the vagina, through the uterus and tubes or by the lymphatics draining the vaginal region.

Third, we have perforations occuring during the course of typhoid fever. This is very rare however. An inflammation of a mesenteric gland may simulate perforation and a differential diagnosis is impossible before operation.

Last, I will mention cholecystitis and cholelithiasis, which are very rare, but cases have been reported in literature.

In taking up the obstructions, acute intussusception leads the list. Its onset occurs very suddenly; frequently in a healthy breast fed baby. Males are affected two to three times more often than females. Most cases occur during the first year of life. In the majority of cases the symptoms are classical; a healthy breast fed infant will have a sudden abdominal pain, legs drawn up, and a pallor more marked than you would expect, vomiting is apt to occur, and there is a shrill piercing

^{*}Read before the South Carolina Medical Association, April 20, 1927, Anderson, S. C.

scream that is very characteristic. These paroxysms are intermittent and in between the baby seems well, but as each occurs they become progressively worse; the vomitus contains fecal matter, the stools only mucus and bright red blood; and at this period a sausage shaped tumor mass can be palpated, usually in the left lower abdomen. This can be mapped out either through the abdominal wall or by rectum. The sudden shrill piercing scream is characteristic in only one other condition, and that is meningitis.

Secondly comes complete pyloric stenosis, and I have placed this as an acute condition because when occurring in the complete form, surgical intervention becomes necessary within forty-eight hours on account of the rapid development of toxic symptoms.

This also occurs more often in males in proportion of about four to one; and is usually between the second and sixth week of life. The onset is sudden, with persistent vomiting which soon becomes projectile in character. The baby is hungry and will take the breast or bottle greedily, only to lose it all during the taking or it may retain several feedings and the mother will state that it has vomited more than the feeding just taken. Complete constipation soon occurs and the urine becomes diminished in quantity until there is only a brick dust stain in the napkin. Peristaltic waves crossing the upper abdomen from left to right can be seen. If not present at time of examination, the giving of water, food or tapping the abdominal wall will cause them to appear. A small hard olive shaped tumor of the pylorus can be felt under the lower rib border, a little to the right of the midline and when found is an important diagnostic point. X-ray examination is not necessary for a diagnosis but the retention of the barium meal over a period of three hours, completes the picture.

Today the Fredit-Rammistedt operation offers a very rapid and complete relief of the stenosis, and if done before there is a loss of over twenty-five per cent of the baby's weight, the mortality is very low. Of course, the preparation before and treatment after operation is very important.

The other obstructions I will name only, as my time is limited; and these are the mal positions, and mal formations of the intestines, in-

cluding congenital bands, Meckel's Diverticulum, atresia; also intestinal obstruction due to fecal masses from foreign bodies, intestinal worms, etc.

Strangulated hernia especially of the inguinal type is apt to occur in the older children, and needs prompt and immediate surgical intervention, when irreducible by ordinary methods.

This then is a rather superficial presentation of these different emergencies; but they are frequent enough in the practice of both general practitioner and pediatrician, to warrant serious consideration. Of course the treatment is surgical; but as we are the first to see them, it's up to us to arrive at a reasonable diagnosis, before calling in surgical help.

REFERENCES

- (1) Gertrude Herzfeld—Brit. M. J. April 3, 1926.
- (2) John Howland—Journal A. M. A., Sept. 27, 1924.
- (3) Richard W. Bolling—Journal A. M. A., Sept. 27, 1927.

DISCUSSION

Dr. T. B. Reeves, Greenville: In reading over Dr. Grimball's paper just reminded me of a paper Dr. Whitehead wrote at the University of Virginia. If you leave out one word you don't get the connection: It is just as concise as anything could be. He has taken up a few subjects there in infant mortality—a subject that has brought the infant morality very high in the State of South Carolina for the simple reason that they have not been recognized or diagnosed by the genral practitioner. And I want to emphasize the fact that you, as well as the hospital surgeon, should realize your responsibilities and should deal with them accordingly.

Now, of course, when any abdominal emergency—whether in a grown man or child or infant—it is always an anxious feeling among the doctors because I had rather operate on anybody else than a baby or young child or child: I will take the grown person all the time. And so, the responsibility connected with it is always exaggerated; but, when it comes to dealing with children you may feel the circumstances are increased when you come to diagnose the condition of a child. I am going to limit my discussion not to any surgical point.

I feel one reason why you general practitioners do not recognize these conditions is in a general way because you do not just simplify the matter quite as much as you should, and my greatest

sympathy is with you. Your judgment, I feel, is biased by two main factors: First, I will say the influence of environment, then the influence of constant association with the case. By environment I mean, you have difficult surroundings to deal with: The objections of the patient to the examination, adverse social conditions; so, I mean by association with the case, you are first to see the case, and then you come back. You did not diagnose it the first time; the second time you come back and take up where you left off before. You are confused by your diagnosis—you wait a while-then you call in a consultant after you send it to the hospital. With X-rays, etc., we have got you at a disadvantage. We have more facilities to make this diagnosis. When you first see the case let your original impressions be complete and make a diagnosis if possible.

Dr. M. W. Beach, Charleston: Mr. President, this is an interesting and instructive paper which Dr. Grimball has presented to us. In dealing with this subject, he has given us a simple classification and has called to our attention the main points in the diagnosis of these conditions.

In the adult, the diagnosis may be a simple matter. On the other hand, it is often exceedingly difficult to elicit from a fretful baby the necessary findings to arrive at a correct diagnosis. Here patience and perseverance are absolutely necessary.

During infancy, intussusception probably holds first place as the causative factor of an acute abdomen; while during childhood, appendicitis has been found to be the chief etiological factor. But even so, we should ever be mindful of the possibility of an acute perforation due to some infection in the gastro-intestinal tract, and that various malformations may produce an acute obstruction. Also traumatic injury is one of the frequent causes of an acute abdomen during childhood.

Dr. A. E. Baker, Sr., Charleston: I wish to emphasize just a few points. The paper has been so thoroughly discussed from all angles.

There are two symptoms which most decidedly determine whether the patient is a surgical one or not. We do not wait for quick pulse, or vomiting, or distention, but these two symptoms: I emphasize these two points as to whether it is surgical or not surgical as the following case shows.

This child met with an accident and it was questioned whether it was surgical or not. We should never wait in these conditions—acute conditions—for X-ray. X-ray is indicated in chronic cases, but in acute cases, where there is a lesion in the abdominal cavity, if you wait for X-ray you sacrifice the patient's chances for recovery.

The two symptoms I am stressing are rigid muscles accompanied with a rising blood count. When you find these, you do not want anything

else but the operating table, and that immediately. If you were to wait until peritonitis sets in, the pulse quickens, extended abdomen, vomiting -then you are too late. This case I mention I saw with Dr. B ___ was a little child that met with an automobile accident and it was a question of whether to operate or not, but, in that we had these two symptoms, we operated. I was asked what was my diagnosis for operating. I said, "That has not come into my mind: I don't know what is wrong but I knew surgery was necessary." We found a ruptured bladder. We do not suspect appendicitis, we expect colic, intestinal upset, etc. Then, most unfortunately, the inclination is to give active medicine-and you all know what active medicine will do to appendicitis.

Dr. J. H. Cannon, Charleston: I would like to report a case of a child two or three years old, with vague symptoms, rather suggestive of appendicitis, but too indefinite to make a diagnosis. Blood counts and urinalyses were made and the child sent to infirmary where these examinations were repeated. X-ray was considered, but decided it would be of no help. The child improved and was discharged to go home in two or three days still undiagnosed.

Realizing that an X-ray was the only thing that had not been done, and although feeling that it could be of no help, nevertheless I telephoned the infirmary to have one made before letting the patient go home. To our surprise it disclosed a straight pin in the muscles of the child's back, evidently entering from the colon where it lies in contact with the back and lacks peritoneal covering. The pin is still in the child's back and so far as I know has never given any further trouble.

Dr. J. H. Taylor, Columbia: May I just call attention to one feature in differential diagnosis in these small children. I don't think any phase of diagnostic ability is called more into play than in these youngsters where one has to be most keen in their observations and most cautious in the conclusions that they draw. I think the two conditions that are most often confused are an appendix condition in these small children and a diapragmatic pleurisy or pneumonia on one side. When you suspect the appendix in a high leucocyte count, although the pneumonia count is apt to be very much higher than the other, what you need is an X-ray. That will save many a false step in differentiating.

Some three or four months ago we saw a case with Dr. Weston. It was a case of appendicitis: Temperature 103, quite restless, pain on pressure on the right side, but there was but little muscular rigidity on the right side. Both Dr. Weston and I went over the lungs and from my ear there was no rale or any dullness, but

Dr. Weston is quite an able man. There was still a very grave doubt as to which of the two conditions it was. That was about 10:00 or 11:00 o'clock, and I asked to wait until we could get a blood count in the course of an hour. In the meanwhile, to be perfectly safe, an X-ray was taken of the lungs—both lungs.

The child had a pneumonia in both lungs, and we had absolutely failed to find one single sign of pneumonia. Now, I will grant you ninety per cent of you here will label me just a "damn fool."

It went into an empyema, and I would like to ask Dr. Grimball if, in closing the discussion, he will touch on that phase of it.

Dr. G. A. Neuffer, Abbeville: This is a most important paper; it is more important, really, to the general practitioner than it is to the surgeon. I wish to confine my remarks to one phase of it, and that is intussusception.

I read a paper at our meeting at Clinton on this subject. At our hospital in Abbeville in the last two years we have had six cases of intussusception. These occurred in children, four of whom were six months old, one was four months old and the oldest one was four years old. They were all boys; there were no negroes. And I believe, in looking back over a practice extending over a good many more years than I would like to mention here, I might recall a number of cases in children that I called dysentery and we lost them; but, after learning about intussusception, if I lose any more I feel it will be indeed quite a reflection.

This intussusception—the picture of it by Dr. Grimball-has been drawn very nearly as I found An apparently well-nourished, usually a breast-fed child, of the ages which I have just mentioned, suddenly falls during play, and you can tell it is in pain; and, after you have seen the first case you will know he is in great pain. Then there is prostration, collapse, rapid pulseout of proportion altogether to the amount of pain; then you will have your projectile-vomiting, which we do not find in our cases to be stercoraceous; then you will have obstruction of the bowels, probably one good fecal movement, and then no more; then distention of the abdomen; complete absence of fecal odor to the stools and these stools may be a clear white mucus or they may be a clear white mucus streaked with blood.

Now, the sausage-shaped tumor spoken of by the authority I was never able to demonstrate. The tumor under the pylorus I have never understood, but I have understood from authorities you get a sausage-shaped tumor.

Five of these cases were operated on promptly and recovered promptly. The sixth was a case which occurred out in the country quite a distance. I was the consultant. We were a little slow in getting that little boy to the hospital—

it was too late. There is only one thing to do, and that is to open the abdomen.

Don't wait for X-ray, but if you will take the picture I have given you and if you have ever seen one case you can't miss it after that.

In the meantime, they will require a hypodermic of morphine.

During that time I was called to see a boy four years old. They were treating him for dysentery. I sent him some medicine. I saw his father a day or so later and said, "How is Billy," and he told me Billy was running around, playing, but still sick. They called me back later and I said, "this boy has intussusception," and I took him to the hospital and as soon as we could get the operating room we operated on him. We found a mass at the illiocecal valve three or four inches long, and the gut becoming very much discolored. After being satisfied the blood was going to come back, we closed him up. Two days later I ordered an enema for him. They showed me the stool, and the obstruction was a big wad of chewing gum!

Dr. I. H. Grimball, Greenville, S. C.: In taking up this paper I explained I did not go into details on all these conditions because the subject is too large and time prohibited, but I am glad Dr. Baker mentioned one thing, and that is laxatives, or purgatives. These things in the hands of the general practitioner should be very much condemned.

Another point is the rigidity. I think that, in the lower right abdomen, is a very valuable sign but in a squalling young child that is scared to death of you anyhow, (and if he isn't, personally, scared of you, his parents make him scared of you), it is a hard matter to tell whether that abdomen is rigid or not.

Another thing I did not mention in a child with appendicitis: A child with appendicitis does not rest nor does he let anybody else rest. If they have an acute abdomen they have no rest.

Dr. Taylor, with his differential diagnosis of appendicitis and pneumonia, I can not throw any more light on that than what each man has experienced, but Dr. Boling's report is very complete, and it is better to open an abdomen and find a normal appendix, than to delay and find it full of pus. According to Herzfeld, "Inflammation goes on to supuration much quicker in childhood." We think the blood count in pneumonia is probably higher than in an acute appendicitis, and every case is an individual case and you will stump your toe because there will be some cases you will overlook in acute appendicitis and you will find it is pneumonia.

Intussusception: That is one condition along with appendicitis that an early diagnosis is very important. I had reference, however, to the tumor up under the rib border in pyloricstenosis and not in intussusception.

SOME OBSERVATIONS CONCERNING SO-CALLED NASAL CATARRH*

By Theo. A. Quattlebaum, M. D., Columbia, S. C.

The high purpose of medicine is the welfare of the patient—the collection of a fee being important but incidental. In these latter days the emphasis is being placed upon the prevention of sickness or if this purpose fail, upon its early detection and prompt and vigorous treatment so as to limit its ravages, and upon the avoidance of complication. Medicine accepts as sound the old saying that "an ounce of prevention is worth a pound of cure." To keep people well is the goal of our great profession, thus apparently killing the goose that lays the golden eggs or sawing off the limb between one's self and the tree. With the object in view of helping the largest number in the most effective way it seemed wise and logical to present for our consideration, a subject which should be of interest to us all as it concerns so many of our patients. A paper of a practical nature rather than of a technical character, one plebeian and useful rather than high-browed and of little utility seemed preferable.

With this foreword, your attention is called to "Some observations concerning so-called 'Nasal Catarrh'," which is the title of this paper. This term has been rather indiscriminately applied to that condition of the nose or naso-pharynx, indicated by more or less nasal obstruction, constant or intermittent, and characterized particularly by an excess of secretion and its accumulation in nose or naso-pharynx and its dropping back into the throat. The expression so-called nasal catarrh is used advisedly. Our word catarrh as you recall, comes from two Greek words meaning to flow downward. This flowing down of the excessive and accumulated secretion which gave this condition its name of catarrh, is not the disease, but only a characteristic symptom. The mucus discharge is no more a disease than is fever.

The great prevalence of this condition is well known to you physicians who frequently meet with it in your practice. May it be permitted to remind you that the subject which we are discussing is that chronic condition of the nasal mucus in which there is a constant increased mucus discharge commonly called catarrh? The causes of at least the principal ones may be grouped under three general heads.

- 1. Congestion or engorgement of the nasal mucous membrane, as for example in organic heart disease, where the damaged organ is no longer able to prolong the peripheral circulation. In diseases of the liver, kidneys, intestines, lungs and pl.eura, you have a damming back of the blood and leakage through the membrane. Sometimes the nasal, with other mucous membranes, have been forced to become vicarious eliminators in diseases of the kidneys, or where large areas of skin have been destroyed by burns. The elimination of the products of intestinal putrefaction and of chronic constipation through the nasal membrane will produce increased mucous exudate. Intestinal worms, especially in children, sometimes produce the condition.
- 2. Primary lesions of the accessory sinuses, where the pouring out of muco-pus over the adjacent tissues, cause increased activity of the mucous glands. Here there is a combined discharge from the nose of the muco-purulent material from the sinuses and membrane. In fact, some of these so-called catarrhs may be in the early stage, only sinus drainage.
- 3. The third and most common cause in my experience is mechanical obstruction due to congenital or acquired narrow nasal spaces; to a deflected or crooked septum; to spurs or nodules, ledges along the septal base, dislocated plates of cartiledge, or by hypertrophied turbinates or an enlarged pharygeal tonsil commonly called adenoids.

Some people are born with a narrow thin nose, certain families showing a disposition toward noses of this type. A larger percentage of narrowed nasal spaces are acquired in early childhood by the victims of adenoids usually. Not only does the nose fail to develop from inability to use it, but in addition, the constant use of the facial muscles in the sniffing effort to draw air through restricted passages, produces a narrow high arch, thus pushing up the flow of the nose, and decreasing the vertical diameter. This same muscle activity pulls back the alveolar processes of the upper

^{*}Read before the Ridge Medical Society meeting, December 19, 1927.

jaw, and the roots of the teeth, hence the protruding front teeth so often found in mouth breathers.

Deflected septums may be congenital but in the majority of instances, together with all spurs, ledges and displaced cartilage plates are due to injuries received somewhere along life's journey. The little fellow runs along, falls and bumps his nose—a little blood, many tears and much coddling follow, and in a little while the incident is forgotten. Or father, trying to find his way in the darkness, strikes his proboscis against something. There follows-and unless he is very pious and self-controlled—there follows some language almost lurid enough to disclose to his eyes the wide-swung door just discovered by his nose. There may be a slight bleeding and some swelling and soreness for a day or two, and larger troubles bring oblivion of the smaller ones. But it is too early to write Omega—the end is not yet. What has actually happened to these two is a dislocated plate of cartilage or an actual but slight fracture of cartilage or bone, or the cartilagenous portion of the septum has been driven backward against the bony vomer. All of this spells damage to these tissues and irritation. Nature in her effort to make repairs, manufactures callus in her usual prodigal way just as she does in repairing a femur, for instance. There a superabundance of callus does no harm, but not so in the nasal cavity which is made to scale. Most all of these injuries are either undetected, or their significance is underated. Of course, in severe injuries the damage may be quite evident and medical aid is sought. Now you have the prime factors present for the production of the condition under discussion, viz., mechanical obstruction and a resultant lessened breathing space, and an irritation which has persisted from the time of the primary injury.

Given a nose with an adequate breathing space and free from irritation, the mucous glands secrete just enough mucus to lubricate the membrane and moisten the air for entrance into the lungs. But with an excessive secretion because of irritation and a lessened amount of air passing through the nose because of the mechanical obstruction, you have an accumulation, which has to be blown out of the nose or expectorated after it has dropped or been sniffed back into the throat. Now, if one could

blow and spit all the while, some of his troubles might be relieved and certain sequellae prevented. But small children are not strong on blowing the nose, and polite society does not permit one to expectorate upon any and all occasions. Yet even if perfect liberty were possible, there are the six to nine hours of sleep during which the secretion accumulates where the only way by which it is partially gotten rid of is by the very harmful one of swallowing it while unconscious. Now, because of the impossibility of keeping the nose and naso-pharynx clear of the secretion, it soon becomes thick, fetid and muco-purulent and therefore the more irritating, thus increasing the output of mucus. There is now formed a vicious circle which proceeds to make a disagreeable state worse.

As it is not intended to read an exhaustive paper which is as a rule exhausting to the hearers, only some of the effects will be mentioned, leaving out any detailed discussion of the modus operandi.

The normal course of respiration is through the nose, which has been constructed for that purpose. As a result of the various causes already mentioned, we have deficient aeration of the blood from improper breathing, the absorption of toxins from the retained fetid exudates. indigestion, and constipation from the swallowing of such stuff, dull headaches, progressive deafness—a common and very serious result, head-noises, etc. It is probably true that the chief cause of impaired hearing is catarrhal inflammation of the nose, passing by continuity through the eustachian tube into the middle ear, or by blocking the tube itself. My impression is—without referring to any records—that a great number of those who come to me complaining of impaired hearing or noises in the ears, give a history of long standing nasal mucous discharge with more or less obstruction. These patients should be warned that some degree of deafness is almost sure to come on around the ages of thirty to forty if this condition is permitted to go on to conclusion.

Treatment. The logical and sensible thing to do is to remove the cause or causes if possible. But before the cause can be eliminated, it must be located. In order to do this a general physical examination, including the blood and a urinalysis may be necessary; and it is

wise to make such examination in all cases unless the cause is unmistakably located in the nose. If it be found that the kidneys or liver or heart for instance, are at fault, restore these organs as nearly to normal as possible. If it be the result of anemia, correct that, or if infected sinuses clear them up. A crooked septum should be straightened or resected; a spur or ledge removed; that adenoids should be gotten rid of there seems to be general agreement among doctors.

Conservatism, so far as it is compatible with relief, should be practiced. The day of radical and reckless cutting away of nasal structures has passed and should never have been. It is better to remove too little than to remove too much. The first fault, the removal of too little. may be corrected by a second operation; but the second, the removal of too much, is irremediable. All of these operations, except in children, may be done in the office under local anesthesia. "Can 'catarrh' (1 use quotation marks) be cured" is a very pertinent and frequently asked question. Unfortunately, for many years the public has been so often victimized by advertising quacks, offering various sure cures for catarrh which failed to cure, that people have become too skeptical to consult a physician, or so doubtful of any relief commensurate with the trouble and expense, that they do nothing about it. When at last they have accepted the repeatedly rejected advice of some physician, or are persuaded by some friend who has obtained relief, or are compelled by their miserable condition, to seek help, they have delayed so long that permanent tissue changes have taken place, so that even if the original cause is removed, a perfect restoration of the membrane to normal is impossible. In spite of this, however, great relief may be obtained. So, reverting to the question, "Can 'catarrh' (speaking the vernacular) be cured," a fair and true answer, based upon the writer's experience and observation would be "Yes," provided the cause is removed in the early stages before permanent tissue changes have occurred. But, as unfortunately few of these cases apply until some changes in the nasal mucosa have supervened, a perfect result may not be expected even though the original cause be eradicated. In a word, it may be rightfully claimed that in all cases, whether recent or of

long standing, if the cause can be removed, some improvement may be looked for, and in many of them, a large degree of relief may be counted upon. Upon the above conditions, the writer's statement to the patient would be that he would have a good nose but not a perfect one.

Please do not carry away the impression that all of these cases require an operation, for a great many of them do not. As you will readily see, if you recall some of the causes given.

But it is most earnestly hoped that you may be impressed with the importance of these nasal affections being corrected as soon as possible, not because of immediate danger to life, but by reason of its indirect and distant effects.

AN ABSTRACT FROM THE SIM'S MEMO-RIAL ADDRESS ON GYNECOLOGY*

By Dougal Bissell, M. D., Consulting Surgeon to the Woman's Hospital of New York

In order to evaluate the genius of J. Marion Sims, it is necessary to trace the historical development of Gynecology from ancient times to the nineteenth century, although, the early Hebrews performed cesarean section and Soranus wrote on the use of the speculum during the dark ages, yet this knowledge was not utilized until 1801 when Recamier reintroduced the speculum and invented the curette and in so doing revived interest in the almost forgotten study of the diseases of women.

In America, at this period, Ephraim Mc-Dowell had returned to Kentucky from Edinburgh the then Center of Medical Education. He operated extensively and successfully until 1800 when he gave his epoch making contribution to the Science and Surgery by performing the first successful ovariotomy for a diseased gland. From 1835 to 1843, in spite of the great work done by McDowell, N. Smith, A Smith, Rogers and Bellinger, abdominal surgery made but little advance. A new impetus was given to it however in 1843 and 1844 by the Atlee brothers who by their startling successes established ovariotomy beyond question as a justifiable and humane procedure.

Until the advent of Sims (1852) Europe was foremost in repair work of the female genital

^{*}Read before the Medical Society of South Carolina, November 22, 1927.

canal and the great contribution he made was the rediscovery and successful application of the metal suture which revolutionized operative technique and added new luster to American surgery. Until this specific addition was made to the armamentarium of surgery, primary union was not the rule, but the exception, for the operators universally used silk sutures in a more or less septic field. With the use of silver wire the picture changed, and instead of primary union being the exception it became the rule

As the result of the impetus given by Sims, plastic work was rapidly developed in America, and to T. A. Emmet we are indebted for the recognition or appreciation of the true significance of cervical lacerations and the discovery and application of their surgical treatment. His operation for the repair of complete perianal injuries was a notable contribution to the conquest of this dreaded injury.

Abdominal surgery furnishes many instances of interesting original work by South Carolinians. As far back as 1816 we find that Dr. John King approached the abdominal cavity by an incision through the vaginal vault and removed by means of forceps a full term child which had developed outside the uterus; and T. G. Thomas in 1870 removed per vaginam an ovarian cyst about the size of an orange. This was the first time that the vaginal approach was deliberately planned for this purpose. John Bellinger was not only the fifth successful ovariotomist, but was also the first to deliberately plan and execute hysterectomyomectomy.

To restrict Gynecology to the study of diseases peculiar to women seems an arbitrary and illogical proposition. We have always looked upon the Genito-Urinary system of the male as one and have so classified it in our studies and surgical work. With this I am in full accord for the reason that histologically the generative and urinary organs are closely akin, that anatomically and physiologically they are intimately associated, that pathologically their diseases are frequently interdependent, and that surgically their relationship being so intimate, operative work upon one demands special care of a surgical work upon the other.

There has been a long battle for the recognition of Gynecology as a specialty. Should

there be an arbitrary line drawn in surgery upon the female between the lower and upper urinary tract? Should the genito-urinary surgeon specialize on the male or the general surgeon arrogate to himself this field?

In its development Gynecology has followed the law of natural growth. Today its workers constitute a large and intellectual group who have contributed as much to the advancement of surgical knowledge for the relief of mankind as any group in the field of practical medicine. But the recognition of Gynecology as a specialty will not be complete until its followers consider it that branch of medicine which pertains to the study of the anatomy, physiology, histology and pathology of the female genito-urinary system.

While American Gynecology is the theme of this address Sims is the figure of chief interest. Sims was born in poverty, but was able eventually to attend and graduate from the South Carolina College. He attended medical lectures at Charleston one season and at Philadelphia the following year. It was at the Charleston Medical College however that he received the suggestion which he utilized to great advantage in the development of his technique for the cure of visico-vaginal fistulas. The perfection of this technique was a long and discouraging struggle but at the end of four years he succeeded and it might be said that seldom has greater courage, confidence, resourcefulness and skill been shown in the annals of history.

Sims was not prolific in his contributions to medical literature but most of them contained brilliant conceptions. He was not a reckless surgeon as many of his enemies tried to make it appear. He may at times have seemed so because he blazed the trail and ventured unfrequented paths, but by analyzing his work it will be found that every step he took was the result of logical thinking and his boldness was always within the limits of reason; and while ever willing to consider the opinions of others nothing could divert him from a conclusion when reached independently or by council and he always stood by his convictions.

Life and work were synonymous to Sims, but his greatest ambition, outside of his unquenchable desire to help humanity, was to teach others, so that those taught might carry on. His early struggle in New York City to

establish himself as a teacher was heart-breaking, but he eventually succeeded. By his enthusiasm, energy, and tenacity of purpose in the face of sickness and persecution, Sims won the sympathy and interest of a small but influential group of men and women; by his personality and scientific achievements he gained their confidence and stimulated the building of the Woman's Hospital, an institution which has been far reaching in its beneficial influence in the restoration of women to health and which today is a living and growing monument to his great genius.

FRACTURES—ESSENTIALS OF TREAT-MENT AND MANAGEMENT

By Wm. A. Boyd, M. D., Columbia, S. C.

You must appreciate the fact, that a detailed discussion of this subject, large as it is, cannot be entered into, in the short space of time allotted, for its presentation. Again, we all know, that fractures are serious surgical injuries, and are often the cause of subsequent permanent disability and deformity. Therefore, it behooves us to give them, more than casual thought and attention, to remember that with their reduction, our responsibility has not ended, but only begun, because in the after treatment, the future comfort of the patient will often depend. A fracture as we all know, is a dissolution of the continuity of bone, with associated injury to the surrounding soft tissues, muscles, nerves and vessels, and to the latter I would particularly call your attention. because the treatment of the fracture must be dependent upon the extent of such injuries; the importance of that statement, may be judged, from the work of Robison and his coworkers, which appears to show, the presence, in the osteo-blasts and hypertrophic cartilage cells, of an enzyme (Phosphoric esterase) which acts on the phosphoric esters of the blood. "It has been shown that amino acids such as would be formed by the autolysis of dead tissue, or haematomata decalcify the bone appreciably and thus tend to reduce the amount of the enzyme present. The enzyme is inhibited in its action by an acid medium."

And as Henderson, (1) says, the fact that this unfavorable influence on ossification does not occur in all cases of fracture is not proof that it cannot happen in some. If this careful experimental work can be accepted, fractures produced by severe injuries, with consequent serious trauma to the soft parts should be regarded with suspicion. It is reasonable to argue, that such a fracture should be opened, and cleared of the damaged tissue and haematomata, accurate reduction should be obtained, and a dry field secured.

All fractures present two important problems in their treatment. Restoration of bony alignment and preservation of function, and it must be admitted, that the preservation of function is the essential goal of treatment, and while perfect alignment, with preservation of function is the true desideratum, under no circumstances should perfect alignment be the goal, at the expense of function.

From observation and experience, I am convinced that most of the ill results of fractures, the after impairment of function, the disabilities, the discomforts—are due to the following causes:

- (A). Repeated, un-intelligent efforts to obtain perfect alignment, in so doing, inflicting permanent injury to the soft parts;
- (B). Splints improperly applied, with resulting impaired circulation, oedema of the soft tissues, with finally a true fibrosis taking place in the joint structures, tendons and soft tissues; especially is this the case in fractures of the fore-arm and lower leg;
 - (C). Too long a period of fixation.

The old saying, that the treatment of fractures requires only "Brains and splints," is as true today as yesterday, but how often do we see cases that have been treated only with splints. From my experience with a large amount of fracture work, I am convinced of the fact that perfect function is entirely compatible with imperfect alignment, and that perfect alignment, obtained only after repeated efforts, does not necessarily insure perfect function; that when a reduction, insuring function cannot be obtained by a careful, gentle surgical effort under general anaesthesia, function will then best be preserved by an open reduction: that when pain persists, and is real, after re-

^{*}Read before the South Carolina Medical Association, Anderson, S. C., April 21, 1927.

duction, it is due either to a faulty anatomical position, or to the applied splints and demands immediate inspection: an hour or two might mean future loss of function and permanent disability.

Early reduction, under general anaesthesia, in all cases of fracture of the long bones, should be the rule, by so doing much of the after swelling will be prevented, and the future management made easier. I do not and will not here lay down any set rule of splintage, that can only be determined by the individual case, because in no two cases with the exception of fractures of the surgical neck of the humerus, of the femoral neck, and supra-condylar fractures of the humerus, are the problems of reduction and its maintenance the same.

Immobilization should be complete and maintained until union is assured; but by no means, should the attending physician or surgeon, fail to see his patient within twelve hours, after the reduction, because of the need frequently of meeting some unexpected complication, or the re-adjusting of his splints. On several occasions I have had cases referred, whose disability has been prolonged and function impaired, because of the disturbance of the circulation, with resulting blebs, and oedema, the direct result of temporary splints applied, and not watched or cared for, which prevented the reduction of the fracture when first seen.

Begin massage, as soon as one is reasonably assured of union. I know of no measures more appreciated by the patient, and more encouraging to the process of repair, than massage and heat.

X-Ray examination is an invaluable aid, in determining not only the type of fracture, but the method of treatment. Under all circumstances insist on stereoscopic films, taken in both the antero-posterior and lateral position. And finally because of the availability of the X-Ray machine do not forget the fundamentals of fracture reduction and treatment, as taught and practiced, with credit to themselves and comfort to their patients, by those who have gone on to the great unknown, long before the Roentgen Ray was discovered.

In the treatment of compound fractures, I am afraid, you will consider my views and practice radical, but experience has convinced

me of the soundness of the practice and 1 am delighted to see so many Surgeons, now writing and advocating the same principle of treatment. I am absolutely opposed to the old idea of treatment, one of watchful waiting for infection. We all know, that in extensive, infected compound fractures that union of fragments does occur, but in mal-position. Why wait for the development of an infection? Is it not reasonable to take such measures as you can to prevent infection and at the same time endeavor to obtain union in good position. It can be done. I believe in and practice, immediate debridement thorough irrigation and washing of the wound with 1-10,000 Bichloride in salt sol., for 15 minutes, following the method of cotton in sterilizing infected joints, accurate reduction and internal splinting, control of all bleeding, closure of the wound and a plaster dressing. Radical, it sounds, but many case have been so treated and are now restored to perfected function.

In the handling of our fracture cases, before attempting a reduction, for the future welfare of the patient, let us first recall the function of the part injured which must be preserved, then the action of the muscles producing the displacement, and finally let our knowledge guide our hands, using splints only to maintain and prove the correctness of our knowledge and judgment. By so doing, the injured will often be saved hours of pain, and months and years of disability, and we as physicians and surgeons will bring greater credit to our profession.

Bibliography.

1. Henderson, M. S. South M. J., 1926, 746

DISCUSSION

Dr. J. R. Young, Anderson: Our experience in the open treatment of fractures has led us to the following opinions as to the place of the open method in treating fractures:

1. It should be done early, if it appears probable that it will have to be resorted to at all. At the time of the first examination of the fracture—especially in fractures of lone bones—when the X-ray plates have been examined and with the patient under an anaesthetic and under fluoroscopic guidance if reasonable effort at manipulation and extension fails to secure satisfactory position of fragments, decision should then be made to resort to open operation and thus save the soft parts the trauma incident to repeated

futile efforts at reduction. Failure to elicit a simple sign—crepitus—occasionally warns us that soft parts interposition is present and that open reduction will be necessary.

2. Open method of treating fractures is not synonymous with plating or wiring fractures. It is often possible (and always preferable if possible) after open reduction of fracture, with patient on fracture table by the use of extension and a properly applied plaster of paris splint, to maintain good position without using plate or wire in wound. However, if plates are found necessary they rarely cause trouble if they are tightly applied.

Two years ago in visiting some of the clinics of Europe, I was struck with the number of open reduction and fixation of fractures which some of the prominent surgeons were doing. Notable among these was Prof. Archibald Young of Glasgo, who heartily endorses this method when the usual closed method does not promise the best results.

Dr. W. M. Sheridan, Spartanburg: The open operation is the essential treatment of fractures. We have just got one or two things to consider.

The first thing we have got to do is the realignment of the broken continuity. The kind of splint we should apply to that limb is left entirely with the operator at the time of operation.

Back in the long ago, before the X-ray, we put up fractures and got good function and results, and if we had taken X-rays of it we would have been ashamed of it. I think it is criminal in this modern day to put up a fracture without first finding out from X-ray what kind of a fracture it is, no matter what it looks like from the outside.

The kind of splint, as I said before, depends entirely upon the cause and condition. We might put it up in extreme flexion, but to do that and get no X-ray of it, we are liable to have an exphosis of it. That has been my experience, and I simply rise to give voice to that.

Dr. S. E. Harmon, Columbia: If there is any one subject that is more important than another, it is fractures and I believe the poorest results are obtained in a general way from the general mechanical position in the fracture. There is not any man that gets anything like 100% on his fracture work.

Restoration of function is what we are after; and judgment at the time as to the type of the fracture is the point for us to handle each point on as it arises. There is not any treatment that can be applied to all fractures or to any one type of fractures. You cannot say you must flex all limbs, with all fractures: It can't be

done. A man must use his judgment for each specific fracture.

The general principles to guide us are apposition of course-we must have that to get the function. And the fracture must be reduced and the parts put in position. We believe all fractures should be reduced under anaesthetic; I don't believe any fracture should be reduced without an anaesthetic. There is not any use for any man to say we are going to sew up all compound fractures because we are not going to do it. We have to use our judgment as to what we can close up and what we must open. The same applies to open and closed treatment of fractures. Some can be handled very well by the closed method, and some must be handled by the open method. It is up to us to decide which will be treated by the open treatment and which by the closed method. Personally, I do not open the tissues if I can reduce it without.

Second, I do not put any free blood in the bone if I can possibly keep from it, because it is dangerous. A little infection with a lowered resistance and you are liable to have a tragic end.

 $\ensuremath{\mathsf{Dr}}.$ L. G. Clayton, Central: There is just one more factor.

A country doctor, about 40 miles from nowhere; it is midnight, and raining, and you have a serious fracture on hand; he has no x-ray, no hospital, and, if he did have, the patient has no money. Now—the question comes up—what are we going to do? We have no means at Central—no hospital, no x-ray, to find out what kind of fracture it is. The question with me is, what to do with your patient. I have treated quite a number of fractures. I read somewhere about a doctor being prosecuted for not giving an anaesthetic for a serious fracture, and I heartily concurred. I heartily concurred in that man being prosecuted.

The question with me is, whether it is pretty good practice to turn them all over to a hospital: I have about made up my mind we will do that.

Dr. Wm. A. Boyd, Columbia: I have enjoyed the discussion on the open treatment of fractures.

On Dr. Epp's paper, I am perfectly frank in admitting it is my opinion and it is my practice that in all fractures of the long bone, where I can not obtain opposition of the fragments when the first case comes in under anaesthetic, is a gentle message and if that is not effective, I do open surgery. Surgery, rather than by pulling and yanking and trusting to God you are going to get the ends together. And if an open reduction is done with care and with proper technique, there will be no infection. I have cases today that have been wearing Lane plates and Sherman plates ten or fifteen years and they

are still there. I had some plates showing fractures of the femora which have been put on fifteen years ago.

We all know—ordinary common sense teaches us—that where we have to plate a fracture of the tibia, where we have no soft tissues to cover over our plate, we will have to look forward to the removal of that plate.

I think a surgeon who gets up and opposes the open treatment of fractures merely because of fear of infection is seriously handicapping his work and the hospital in which he is working.

UROLOGY

W. B. LYLES, M. D., Spartanburg, S. C.

PYELITIS IN PREGNANCY

Based on reliable clinical reports women are more prone to kidney infections than men. The percentage varying from 60 to 70 percent of all renal infections. The intricate net work of lymphatics, pregnancy, menstration, constipation, ptosed kidney with its associated kinked ureter prolapsed uterus and splanchnoptosis are perhaps the important contributing factors to this disproportion in the sexes.

If we accept this clinical data, then every pregnant woman should be regarded in a sense a urological case. A careful study of the urine during the early months of pregnancy should be done. Pain referable to the urinary organs and vesical irritability are indications for urological investigation and can be done with little danger to the patient. In the early months of pregnancy, mild grades of infections are much more common than is generally recognized. These mild infections frequently cause no symptoms except changes in the urine which are often regarded as a cystitis or albuminuria of pregnancy. Frequency and burning on urination is often construed to be pressure on the bladder when in reality it is due to a bacteriauria. This is the time when proper treatment would prevent further trouble. As pregnancy advances many of these low grade infections will have developed into one of greater virulency. Paliative treatment may first be tried. This consist in changes of position, water freely and the administration of urinary antiseptics. Should they fail to respond to paliative methods, the indwelling ureteral catheter should be used. It must be remembered, we are dealing in many instances with an infectious renal retention. This type of case is extremely sick and septic. The temperature is high, chills, nausea, marked weakness and exhaustion. Pain over the kidney and along the course of the ureter. It is this kind of case that the ureteral catheter serves as a life saver. The relief of the retention is immediate, the patient rapidly improves and is able to go to a normal delivery with comfort and safety.

B. C. Corbus and W. C. Danforth, Journal of Urology, November, 1927, gynecology and obstetric service, Evanston Hospital, Evanston, Ill.; present a most excellent contribution to this subject. They report a series of cases occurring in their service for a period of a year and a half. They selected only cases of pyelitis during pregnancy sufficiently severe to cause temperature. From an analysis of their cases they believe that the cause of pyelitis during pregnancy was already present before pregnancy began; that it was either a congenital or acquired obstruction to the urinary outlet. They agree that the pressure of the pregnant uterus does play a role in the etiology but to what extent has not been determined.

They conclude:

- (1) In thirteen consecutive cases upon which pyelographic studies were made after termination of pregnancy, pathology in the urinary tract was demonstrated.
- (2) Termination of pregnancy does not cure the pyelitis. These cases should be treated after pregnancy ends that adequate urinary drainage may be restored.
- (3) As pathology of the urinary tract existed after pregnancy terminated, pathology must have existed before pregnancy began.

WOMAN'S AUXILIARY

South Carolina Medical Association

OFFICERS

Mrs.	H. M. Stuckey, Sumter, S. C.	- President
Mrs.	W. H. Nardin, Anderson, S. C.	First Vice-President
Mrs.	I. H. Grimball, Greenville, S. C.	Second Vice-resident
Mrs.	Frank Wrenn, Anderson, S. C.	Recording Secretary
Mrs.	William Boyd, Columbia, S. C.	Treasurer
Mrs.	Charles J. Lemmon, Sumter, S. C.	Cor. Secretary
Mrs.	M. L. Parler, Wedgefield, S. C.	Publicity Chairman

COUNCILORS

Mrs. W. G. Gamble, Jr., Charleston, S. C First	District		
Mrs. Ben Wyman, Columbia, S. C Second	District		
Third District to be Appointed.			
Mrs. J. W. Bell, Walhalla, S. C. Fourth	District		
Mrs. A. M. Wylie, Chester, S. C Fifth	District		
	District		
	District		
Mrs. L. A. Hartzog, Olar, S. CEighth	District		

My dear Auxiliary Members:

A happy New Year to you! May 1928 be the healthiest year of your life, for of course, you have diligently read the Hygeia and followed its excellent advice and renewed your subscription.

Then too, you are more in touch with health measures which are remaking the race. You have had your annual physical examination and persuaded your friends to take this splendid ounce of prevention. You are in the midst of the interesting programs on Microbe Hunters. You have studied the Medical Practice Act of South Carolina under which law your husbands work. You have enjoyed preparing the hot school lunches for your primary school children and your hearts have been warmed by the good you have accomplished in many untold ways as a member of the Medical Auxiliary.

You have made delightful friends of the other doctors wives in your community and you know the name of every nurse in your training school, having entertained them at a summer picnic or a Christmas party.

Your Sims Memorial donation for 1927 is paid and you are ready for the new subscriptions on the last 1,000 dollars. You see, I am assuming that you have followed the fine program of work and pleasure set forth at the Anderson Convention, so great is my faith in the earnestness and efficiency of the women I met there.

The way is clear to go ahead with this great undertaking of the Sim's Memorial and carry it to a successful completion in the near future. Interest is aroused everywhere since two State papers, December 4th, carried such attractive publicity. Don't fail to do your part.

Cordially yours,

Daisy Lee Stucky.

NEWS NOTES

The State Medical Auxiliary is greatly indebted to one able publicity chairman for the splendid five page of J. Marion Sims articles. Mrs. M. L. Parler worked a month on the layout and received the interested cooperation of such men as Dr. Robt. Wilson, Mr. Wm. Boddie, Mr. James Henry Rice, Dr. Douglas. We wish to express our deep appreciation to them for their invaluable help.

Mrs. H. M. Stuckey visited Dillon, December 12th, and met with several of the doctors and their wives. They promised to organize Medical Auxiliaries in the near future, and to collect contributions for the Sim's Memorial.

Doctors Green and Martin of Mullins have undertaken at Mr's. Stucky's request, the collections for the Sims Memorial in their community.

Col. Leroy Springs made a generous contribution to the Sim's Memorial (\$500.00) and wrote a beautiful letter to the President of the Auxiliary expressing his admiration of Dr. Sims, and his indebtedness to his skill in ministering his (Col. Spring's) mother.

The President of the Woman's Auxiliary has received an interesting letter from Mr. Barnard M. Baruch of New York City, (a former South Carolinian) expressing his pleasure in having a share in the Sims Memorial, as Dr. Sims was a man whom he delighted to honor, and inclosing his check for \$100.00.

Nearly 100 letters were sent to prominent people of the State during December, by the Endowment Chairman, Mrs. S. C. Baker of Sumter, requesting donations.

We take this means of thanking those members of the Medical profession, who have so promptly responded.

Waterloo, S. C., Oct. 26, 1927.

Mrs. William A. Boyd, Columbia, S. C.

My dear Madam: It gives me great pleasure to enclose to you a check for ten dollars (\$10.00) to be applied to the Memorial to the late Doctor J. Marion Sims, one of the immortals born and reared in our State. My greatest regret is that I am not able just at present to send a larger sum, the present price of cotton being the cause. I blush for South Carolina that we have been so

tardy in doing honor to the great and good Sims.

I sincerely hope the full sum needed for the Memorial will be realized ere the coming of next April. With my best respects, Madam, I beg to remain.

Yours truly,

Clarence Cuningham, Waterloo, S. C. (Laurens Co.) R. F. D. No. 2, Box 15. The Ladies Auxiliary of the Ridge Medical Society met at Dr. W. P. Timmerman's with Mrs. Timmerman and Mrs. Ballenger as hostesses.

This Auxiliary has been very active in working for the Sims Memorial Fund and in placing Hygeia in various schools.

It meets at the same time the Society meets and occasionally meets with the Society.

Reporter.

SOCIETY REPORTS

PROCEEDINGS OF THE ANNUAL MEETING
OF THE MEDICAL SOCIETY OF SOUTH
CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY, DEC. 13, 1927,
AT 8:30 P. M.

Meeting was called to order by the President, Dr. Edward Rutledge.

Present: Doctors A. E. Baker, A. E. Baker, Jr., B. R. Baker, Ball, Banov, Beach, Beckman, Boette, Bowen, Bowers, Burn, Byrnes, Cannon, deSaussure, Chamberlain, Frampton, Finger, Gamble, Gantt, Heidt, Jackson, Jenkins, F. B. Johnson, W. H. Johnson, Kollock, Lynch, McCrady, Maguire, Martin, Mitchell, Mood, O'Driscoll, E. F. Parker, F. L. Parker, Pearlstine, Phillips, Plowden, W. H. Price, F. R. Price, Ravenel, Richards, R. B. Rhett, W. P. Rhett, W. M. Rhett, Rutledge, Sanders, Scharlock, Scott, Sedgwick Simons, J. E. Smith, W. A. Smith, Speissegger, Taft, Townsend, Walsh, Waring, Wild, I. R. Wilson, Robert Wilson, Zerbst. (60).

Guests: Dr. Stubbs, of New Jersey.

Minutes of the meeting of November 22nd were read and confirmed.

The Secretary read a leter from Dr. Roderick Macdonald, requesting transfer of his membership to the Columbia Medical Society. It was moved, seconded and carried that Dr. Macdonald's membership be transferred to the Columbia Medical Society, provided he is in good standing in this Society.

Dr. W. M. Rhett Chairman of the Committee on Public Health and Legislation, made a report covering the communicable diseases prevalent in Charleston and Charleston County during the past month. It was moved that this report be received as information.

The Seretary stated that there were now two vacancies on the Board of Censors—Dr. O. B. Chamberlain's term expiring in 1927, and a vacancy created on the Board by the death of Dr. T. Grange Simons.

The President called for nominations to fill

these vacancies. Dr. Chamberlain was nominated to succeed himself, and Dr. C. W. Kollock was nominated to fill the unexpired term of Dr. T. Grange Simons, the term of Dr. Simons expiring in December, 1928.

Under "Miscellaneous business," Dr. J. H. Cannon, Councillor for this District, read a letter which he had received from the Committee of the Womans' Auxiliary in regard to the Sims Memorial Fund. This letter urged members of the Medical Society of South Carolina to contribute to this fund, and pointed out the progress which had been made up to the present time.

It was moved, seconded and carried that all members pay their quota to this fund as soon as possible. It was also moved that the Society endorse the efforts of the Womans' Auxiliary and congratulate them on the progress which they are making in raising funds for the Sims Memorial, and that the Secretary send out notices to the members who have not contributed and also that the Secretary write the President of the Womans' Auxiliary acknowledging receipt of the letter.

The President stated that it was his sad duty to announce the death of two distinguished members of this Society during the past month: Dr. T. Grange Simons, who died November 30th, and Dr. Charles P. Aimar, who died on December 1st.

It was moved, seconded and carried that the President appoint Committees to draw up suitable resolutions of respect. The President then appointed Drs. Cathcart, Robert Wilson and Kollock to draw up suitable resolutions to Dr. Simons, and Drs. Maguire, F. R. Price and Taylor, as a Resolution Committee for Dr. Aimar.

Dr. J. I. Waring was present, and signed the Constitution after he expressed his pleasure at becoming a member of this Society.

The President then announced that the Society would now proceed with the election of officers. The following, who had been previously nominated, were unanimously elected to fill the positions set opposite their names:

President: Dr. H. P. Jackson.
Vice-President: Dr. E. L. Jager.
Secretary: Dr. W. Atmar Smith.
Treasurer: Dr. J. H. Cannon.
Librarian: Dr. W. C. O'Driscoll.

Board of Commissioners: Dr. J. J. LaRoche.

Delegate: Dr. O. B. Chamberlain.

Alternates: Doctors M. W. Beach, W. A. Smith, J. E. Smith, D. L. Maguire, J. J. Ravenel.

Board of Censors: Dr. Chamberlain to succeed himself. Dr. C. W. Kollock to fill unexpired term of Dr. T. G. Simons. (Dec., 1928).

Dr. Edward Rutledge, retiring President, made a short address setting forth some of the achievements of the past two years, and expressing his deep appreciation of the cooperation which the members of this Society had given him during his term of office as President.

He then appointed a committee composed of Dr. Kollock and Dr. R. B. Rhett to conduct the newly elected President to the chair.

Dr. Jackson expressed his pleasure and appreciation in being elected President, and pledged himself to use his best efforts for the welfare of this Society during the ensuing term.

Th meeting then recessed for a buffet supper which was served in the Society's hall.

At the conclusion of the supper, the President called upon Dr. Edward F. Parker to give his annual address. Dr. Parker gave a very delightful humorous talk on "What Ailed Him" at the conclusion of which the meeting adjourned.

W. Atmar Smith, Secretary.

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SO-CIETY HELD IN THE DIRECTORS' ROOM OF THE CHAMBER OF COMMERCE, MONDAY, DE-CEMBER 5TH, 1925.

The meeting was called to order by President Wilkinson at 8:25 P. M. with about 45 members and guests from Spartanburg present.

The minutes of the last meeting were read and approved as read.

Reports of clinical cases were then called for. Dr. Tyler moved that the scientific programme be taken up first on account of the election of officers that was to follow; seconded and carried.

President Wilkinson then introduced Mr. Charles Stevens of Parke, Davis & Co. who gave a most informing talk on "How Biologicals are Made." Mr. Stevens first gave an historical sketch stating that the Diphtheria bacillus was discovered by Klebs in 1883, and that von Behring first demonstrated the value of antitoxin in 1893, which was followed soon after by the discovery

of tetanus antitoxin. In 1906 antimeningococcic serum was first introduced; this discovery was announced by Simon Flexner in the same year after separate investigations. In 1925 the Dick's made their classic Scarlet Fever investigations and introduced to the medical profession valuable preventive and therapeutic agents in the form of Scarlet Fever Toxin and Scarlet Fever Antitoxin. Mr. Stevens also called our attention to the introduction of Erysipelas Antitoxin by Birkhaug in 1926. He further stated that work is being carried out on Rosenow's Poliomyelitis Serum, and that announcements relative to its dosage, efficacy, etc., would be made in the near future. He also informed us that work is being carried out with a possible antitoxin for Puerperal Sepsis.

One of the most important precautions to take in the manufacture of sera and antitoxins is the removal of all the protein possible: in the case of Diphtheria Antitoxin the protein has been removed and the serum concentrated so that 20,000 U. of antitoxin are contained in 6 cc., whereas 20,000 U. of Tetanus Antitoxin are contained in 1.5 cc.

In the preparation of bacteriacidal sera dead organisms are first given to horses, followed by live, attenuated organisms, the virulence of which is increased gradually. The process of removal of the globulin in Diphtheria and Antistreptococcic sera involves the extraction of the antitoxin, the same is true in the case of Antipneumococcic Serum, and this has to be avoided in the manufacture.

Mr. Stevens then outlined the manufacutre of vaccines and stock vaccines, after which he showed some very interesting moving pictures giving in detail the manufacture of Diphtheria Antitoxin, Typhoid and Smallpox Vaccines.

With the completion of the scientific programme the matter of business was in order. Dr. J. M. Fewell moved that Mr. E. E. Aiken be paid \$25.00 a year for clerical services rendered the Society and that this be made retroactive for the year 1926; seconded and carried.

Mr. Sloan then addressed the Society relative to his desire to start a collecting agency for Physicians and Dentists. After some discussion, Dr. Tyler moved that the Society endorse Mr. Sloan's plan; seconded and carried.

The application of Dr. J. F. Simmons for membership in the Society was then read; Dr. Fair moved that Dr. Simmon's application be referred to the Board of Censors; seconded and carried.

Dr. Murray moved that the Secretary write a letter of sympathy to Mrs. J. G. Mock on account of the death of her husband, Dr. J. G. Mock who died on December 5th; seconded and carried.

The next item of business was the election of Officers for 1928, and the President called for nominations for President.

Dr. C. O. Bates nominated Dr. P. Joseph Johnston of Greer.

Dr. Tyler nominated Dr. W. S. Fewell.

BALLOT

Dr. Johnston-15 votes.

Dr. W. S. Fewell-9 votes.

Dr. Johnston was declared elected to the Presidency for 1928.

The election of a Vice-President was then called for.

Dr. W. S. Fewell was elected Vice-President by acclamation.

Then followed the election of a Treasurer and Secretary:

Dr. Hugh Smith was re-elected Treasurer by acclamation, and Dr. Barksdale was re-elected

The election of two (2) delegates and two (2) alternates for the State Meeting was called for.

Dr. Brown nominated Dr. C. O. Bates.

Dr. Curran B. Earle nominated Dr. Brown.

Dr. J. M. Fewell nominated Dr. Kluttz.

Dr. Hearin nominated Dr. J. M. Fewell.

BALLOT

Dr. Kluttz-12 votes.

Dr. C. O. Bates-10 votes.

Dr. Brown-7 votes.

Dr. J. M. Fewell-7 votes.

Dr. W. L. Bates moved that the two men receiving the lowest number of votes be chosen as alternate delegates; seconded and carried.

The election of three (3) members of the Board of Censors was then in order.

Doctors Evatt, W. L. Bates and Fair were nominated and elected by acclamation.

There being no further business the meeting adjourned.

Irving S. Barksdale, M. D., Secretary.

RESOLUTIONS

The Cherokee County Medical Society offers the following resolutions of respect upon the death of Dr. B. R. Brown:

Whereas God in his infinite wisdom has seen fit

to remove from our midst one of our members, be it resolved

- 1. That the Society has lost a faithful member, and the community a servant who has labored long and faithful, ever standing for that which was high and noble in the profession.
- 2. That we extend to his family our sympathy in their sorrow and bereavement.
- 3. That a page in the records of the Society be dedicated to his memory, that a copy of these resolutions be sent to the family, and that they be published in the local papers and in the Journal of the South Carolina Medical Association.

Respectfully submitted,

S. B. Sherard,

C. C. Freed,

A. L. Little.

December 22, 1927.

RIDGE MEDICAL SOCIETY MEETING

The Ridge Medical Society met Monday evening, the nineteenth of December, in Dr. Timmerman's office.

The meeting was well attended and much interest manifested.

Dr. W. H. Shealy made an excellent address on focal infections which elicited considerable discussion.

Dr. Theo. A. Quattlebaum read a valuable paper on Nasal Catarrh. It also elicited profitable discussion.

The following were named as a committee to arrange for the Second District Medical Association which meets here Wednesday, January 18, 1928; Doctors E. C. Ridgell, R. H. Timmerman, W. T. Gibson and A. L. Ballinger.

Supper was served at the Commercial Hotel where Dr. S. O. Pruitt gave an interesting and instructive address on his observations of the practice of medicine during his sojourn in China.

The Society was much pleased to have Doctors Quattlebaum and Pruitt who are former citizens of Batesburg meet with it.

Dr. W. P. Timmerman, Reporter.

MEDICAL RESERVE CORPS

By COLONEL JAMES E. DANIEL, MED. RES., GREENVILLE, S. C.

COMMITTEE ON MILITARY AFFAIRS

Colonel Jas. E. Daniel, M. C., Res. Greenville, S. C., Chm'n Lt. Col. E. E. Epting. M. C., Res. Anderson, S. C. Major Martin Crook, M. C., Res. Spartanburg, S. C. Major W. C. O'Driscoll, M. C., Res. Charleston, S. C.

HEADQUARTERS FOURTH CORPS AREA

Office of the Corps Area Surgeon Fort McPherson, Georgia

January 6, 1928.

Dr. E. A. Hines, Secy. South Carolina Med. Assn., Seneca, S. C. Dear Sir:

Submit herewith, changes of assignments of Reserve Officers, (Medical and Dental) residing in your state.

This information is submitted for publication in your state Medical Journal, if desired.

1st Lt. Jacob Augustus Barnhart, Dent-Res., 806 Chamber of Commerce Bldg., Greenville, S. C., is assigned to the 82nd Division.

1st Lt. Floyd Milton Norman, Dent-Res., Aiken, S. C., assigned to 82nd Division.

1st Lt. Jacob R. McAlany, Dent-Res., Ft. Mill, S. C., is relieved from assignment to 557th Engr. Bn., due to expiration of appointment.

Captain William Evans Lester, Med-Res., is relieved from the 4th Med. Regt. and assigned to the 5th Med. Regt.

Captain Henry Bettis Malone, Med.-Res., 104 Smith St., Chester, S. C., is relieved from the 4th Med. Regt., and assigned to the 5th Med. Regt.

Captain John Sommers Wimberly, Med-Res., Branchville, S. C., is relieved from 4th Med. Regt., and assigned to 5th Med. Regt.

1st Lt. Charles Bernard Herman, Med-Res., 114 W. Broad St., Statesville, N. C., is relieved from 4th Med. Regt. and assigned to 5th Med. Regt.

1st Lt. Paul Herndon Neese, Med-Res., Swansea, S. C., is relieved from 4th Med. Regt., and assigned to 5th Med. Regt.

1st Lt. Augustus Henry Hayden, Jr., Dent-Res., 520 Sims Ave., Columbia, S. C., assigned to 5th Med. Regt.

1st Lt. Morya Howard Anthony, Sn-Res., Anderson Co. Hosp., Anderson, S. C., assigned to 5th Med. Regt.

Captain Joseph Decherd Guess, Med-Res., 3281/2 N. Main St., Greenville, S. C., assigned to 5th Med. Regt.

Major George Benet, Med-Res., 701 Pavilion Ave., Columbia, S. C., is relieved from assignment to the 344 Med-Regt. and placed on the unassigned list, for emergency Field Recruiting duty at Columbia, S. C.

H. A. Webber, Colonel, Medical Corps, Surgeon.

LISTER'S DISTRIBUTORS

In this issue appears a two page colored insert of Lister Bros., Inc., New York City. For the convenience of readers, a list of their distributors in the field covered by this Journal is herewith given:

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Anderson, S. C.—Bigby's Pharmacy, McLeskey-Todd Drug Co.

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CORRESPONDENCE COUNTY SECRETARIES

Timmonsville, S. C .-- Cole Drug Co.

Charleston, S. C., January 12, 1928.

Dear Doctor: I am enclosing a Resolution which was passed by the Board of Trustees of the Medical College at their last meeting. The suggestion was discussed enthusiastically and the Resolution passed unanimously. They all felt that no more worthy memorial could be erected to the memory of Dr. Sims than a building at the Medical College where his ideals and life work would be a continual inspiration to medical students, as well as serving as an instrument in carrying on the work and teaching of this great South Carolinian.

I trust that this Resolution will meet with a favorable reception by the members of your Society.

Yours very truly, Robert Wilson, M. D., Dean.

THE FOLLOWING RESOLUTION WAS ADOPTED BY THE BOARD OF TRUSTEES ON JANUARY 4, 1928:

That the General Assembly be requested to appropriate the sum of \$250,000 for the erection of a Memorial to J. Marion Sims in the form of

a building devoted to medical education and clinical research at the Medical College of the State of South Carolina.

That a copy of this resolution be sent to the Ladies' Auxiliary with the request that they cooperate with the Board of Trustees in securing the appropriation.

That a copy be sent also to Dr. D. L. Smith, President of the South Carolina Medical Association, and to Dr. E. A. Hines, Secretary of the State Medical Association, and Editor of the State Medical Journal, and to the President of each County Medical Society in the State.

CONTRIBUTORS TO SIMS' MEMORIAL Dr. Wilkie Jervey ______\$ 25.00

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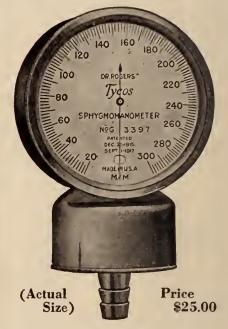
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The Journal

South Carolina Medical Association

VOL. XXIV.

GREENVILLE, S. C., FEBRUARY, 1928

NO. 2

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- —A VALUABLE ADJUNCT IN TREATING TUBERCULOSIS
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OF THE

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Published Every Month Under the Direction of the Board of Councilors.

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EDITORIAL

SECTIONAL MEETING AMERICAN COL-LEGE OF SURGEONS IN SPARTANBURG

Another great national organization selected South Carolina for one of its branch meetings recently in Spartanburg. The policy of the College to divide up its interests and bring the activities to the surgeons back home and to the public would seem to be eminently wise. The profession of Spartanburg as usual measured up to its well known ability to take care of large numbers of people in a highly creditable way. The varied interests of the College are so well known that their coming into any community is a great stimulus to all concerned. The clinics held in the Spartanburg hospitals were well attended and conducive to high grade work on the part of both the hospitals and the clinicians. The Public Health and Scientific Programs were carried out in a splendid way. The attendance was

good all the way through. South Carolina surgeons have been recognized since the founding of the College as men of splendid ability and leaders i.p.

SIMS MEMORIAL AND WOMAN'S AUXILIARY

Elsewhere in this issue appears interesting news items about the work of the Woman's Auxiliary in this and other States. As we go to press there is good evidence that the Legislature will appropriate twenty-five hundred dollars to supplement the Sims Memorial Fund now being subscribed to by physicians and many others. We are glad to publish herewith a summary of the voluntary contributions in addition to those published in the January issue of the Journal. We concur in the request of the Publicity Chairman that the physicians of South Carolina Take This And Other Journals Home To Their Wives.

Contributions to Sims Memorial

Am't. collected to Jan. 12\$2	2,335.08
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York Co. Med. Auxiliary	113.00
The New Century Club (Columbia)	5.00
The Woman's Club (Columbia)	5.00
Charleston Co. Med. Auxiliary	10.00

Total Am't. Rec'd. Feb. 13, 1928_\$2,570.08

In the list of contributions published in January Journal, an item of \$53.50 was erroneously credited to "Fairfield Co. Med. Auxiliary". It should have read "York Co. Med. Auxiliary_____\$53.50". I make this correction with apologies to York Co. Auxiliary.

(Mrs. Wm. A.) Mary K. Boyd,

Treasurer Sims Mem. Fund.

SOUTHERN SECTION OF THE AMERI-CAN LARYNGOLOGICAL, RHINOLOGI-CAL AND OTOLOGICAL SOCIETY, INC., MEETS IN GREENVILLE

South Carolina was honored by the presence of a large number of distinguished specialists from many parts of the United States at the meeting recently held in Greenville, the program of which is published elsewhere in this issue of the Journal.

The meeting was presided over by Dr. J. W. Jervey of Greenville and Dr. W. H. Nardin of Anderson acted as Secretary. The visitors were royally entertained while in the city and evidently went away keenly appreciative of Greenville as a scientific center as well as an attractive convention city. It would appear to be very desirable that these great national organizations frequent our state with their divisional meetings. Such a plan is inspiring to our own physicians and better acquaints the national body with the high class attainments of a large number of men whom they might not otherwise come in such close contact with.

THE UROLOGICAL ASSOCIATION OF SOUTH CAROLINA

The first annual meeting of the urologists in their new organization was held at Spartanburg on February 7, under the Presidency of Dr. Milton Weinberg of Sumter. This new society promises much for a specialty which has made wonderful advances in recent years. There were a large number of visitors to enjoy the program which we publish elsewhere.

ORIGINAL ARTICLES

THE COMMON COLD

By W. J. Bristow, M. D., Columbia, S. C.

It is not with the idea of developing original theories that this paper is presented before the Second District Medical Society, but is merely an attempt to give briefly some of the newer views regarding the etiology of the so-called "common cold."

The common cold is one of the commonest of all diseases, yet it is one about which very little of a definite character is known. But a disease which gives so much discomfort and one which interferes with our personal plans so often, is well worth studying.

Clinically, the common cold may be considered as essentially characterized by hyperaemia, excessive secretion, or both, of the mucous membranes lining the nose, throat, and bronchi. Extension from one part of the respiratory tract to another is frequent. The familiar symptoms are, dryness or swelling of the part involved, with sometimes excessive secretion, all leading to a loose dry cough, obstruction to nasal breathing, hoarseness and sore throat. Often there are more general symptoms such as fever, aching, constipation, and frequently headache.

The clinical resemblance between colds and any known infective process is not a very close one, and consequently a cold should not be arbitrarily assumed to be an infection of the respiratory mucous membrane. There is often no demarcated area of infection to correspond with that produced by such known parasites as diphtheria or Vincent's angina. Purulent discharge and lymphadenitis may occur, but they are uncommon and when present usually represent a complication such as sinusitis.

In studying the eitology of colds Jordon and his associates working at the University of Chicago, have collected some very interesting statistical and laboratory data which indicate

* Read before the Second District Medical Association, Batesburg, S. C., January 18, 1928.

that the common cold is not a simple type of infection and in some instances not even an infectious process at all. They believe that numerous factors are concerned in the production of a cold, and that it is not always due to the entrance of some virus from without the body. They regard internal body changes to be the more important factors.

During their investigations over 2300 students in Chicago, III., Pasedena, Cal., and Galveston. Tex., were questioned. It is interesting to observe the various popular conceptions of the etiology of colds as shown by the answers from these students, but it is significant that 64% of this number gave, as the cause of their colds, some factor regulating the heat regulating mechanism of the body; that is to say: exposure to cold, sudden chilling, draughts, poor ventilation, wet shoes or clothing, swimming, change of clothing or temperature. About 22% gave contagion, or exposure to persons already having colds as a cause of their own colds. The remaining 14% mentioned other factors such as fatigue, constipation, nose and throat trouble.

This data is also very interesting from a standpoint of climate. Most of us have been taught to believe that a rugged or changeable climate is conducive to catching cold. But the answers received from these 2300 students showed that the yearly frequency of colds in the Chicago, the Pasadena, and the Galveston groups to be very close, and there was actually a lower frequency in Galveston than in Pasadena, where the climate is particularly equable. Another point in this data relates to the so called "resistance building" practices. popularly supposed that persons who keep themselves in excellent physical condition, who exercise regularly, and who sleep with wide open windows, are less liable to respiratory disorders than those not indulging in these practices. In this group of 2300 students "resistance building" had little effect upon the frequency of colds. In other words those students who followed a strict regime to keep up their vitality and build up their resistance, had colds as frequently as those students who followed no set regime.

The result of their laboratory investigations showed that no one organism or group of organisms predominate in the upper respiratory tract during a cold, and they consider the question of a specific infectious virus still an open one.

Working along similar lines Olitsky and Mc-Cartney, at the Rockefeller Institute, have shown from experiments on rabbits that the naso-pharyngeal secretions of the common colds are distinct from those of influenza, and that the common typical infectious cold is transmitted from man to man with filteres naso-pharyngeal washings in early cases (8-18 hours), but transmission has failed in cases in which colds were caused by exposure or chilling of the body, and not by definite contact with other cases of common colds. This gives weight to the idea that there are numerous factors concerned in the production of a cold. and that all colds are not an infectious process. In their laboratory cultivation of the nasopharyngeal washings has failed to reveal any constant pathogenic agent or incitant.

Mudd, Grant, and Goldman, in a very painstaking group of experiments, have revealed some new facts about acute inflammations of the nose, pharynx, and throat, as related to chilling of the body surface. By means of specially devised apparatus they were able to measure the temperature changes and vasomotor responses in the mucous membrane of the nose and throat when distant parts of the body surface were chilled. Subjects were chilled by applying cold wet towels to the back, and exposing the back and shoulders to the draft of an electric fan. The temperature of the room was controlled and each experiment checked many times. Their results are almost diametrically opposed to the commonly accepted ideas of what takes place during chilling of the body surface.

Heretofore it has been held that when a man is chilled a congestion of the upper respiratory mucous membrane occurs and that this is responsible for the lowering of resistance locally in the nose and throat. But the work of these experiments has shown that the opposite is true, namely, that a chilling of the body surface causes reflex vaso-constriction and ischaemia of the mucous membrane of the nasal cavity and nasopharynx. This is one of the most important single observations that has been made in the study of the etiology of colds. They conclude that this is only one factor by which resistance to bacterial infection may be lowered, and that it effects a local change of equilibrium between host and parasite by decreasing cell respiration, by retarding the removal of products of cell metabolism, or by increasing the permeability of epithelial cell surfaces to the bacterial products, or by decreasing the local supply of specific antibodies, or by altering the state of aggregation of the colloids of the protoplasm, or by a combination of these factors.

Another mechanism often responsible for a cold has been described by Hill, who found that in hot, moist, over-crowded rooms, such as poorly ventilated theatres and meeting places, the mucous membrane over the turbinate bones and nasal septum swells, becomes turgid with blod and tissue lymph, and covered with a thick secretion. In such places droplet infection from person to person is very likely to occur. On going out into the cold outer air the blood vessels become constricted, and the nasal mucous membrane is chilled, but remains swollen and edematous with tissue lymph, which latter condition is suitable for bacterial proliferation.

In a discussion of the etiology of colds consideration must be given to the anaphylactic cold, and to inflammations due to systemic, neurotic, and mechanical factors. It is not at all uncommon for some patients to complain of what they call hay fever symptoms or very frequent head colds throughout the year. The kind of case usually sees the nose specialist who calls the condition vaso-motor rhinitis, and the internist sees very little of the condition. These cases should be tested for sensitization of such things as horse dandruff, cat hair, various foods and pollens. In true pollen cases the sensitization renders the mucous membrance extremely sensible to draughts, odors, dust particles, and bacteria. The point here for the laryngologist, the internist, and the pediatrist to remember is to be ready to do skin tests, when indicated, in frequently recurring colds.

It is only mentioned as a differential diagnostic point that acute rhinitis occurs as a local prodromal symptom in many of the acute infections such as measles and influenza. Coryza may be set up in those exposed to local irritants, such as tobacco workers, millers, etc., upon the administration of certain drugs such as potassium iodide or arsenic, by obstructive affections of the nose and throat such as polypi or adenoids. In certain individuals vasomotor turgescence of the nasal mucous membrane may be due to exposure to bright lights, gastro-intestinal disorder, or sexual irritation.

It will be evident from a consideration of the above mentioned facts that a state of confusion exists as to the etiology of the common cold. It is also evident that discussions of "colds" in our common text books are absolete.

Since the early days of bacteriology an attempt has been made, on the one hand, to refer the common cold to the action of a specific micro-organism; on the other hand, to various environmental and constitutional causes, such as exposure to changes in temperature, gastro-intestinal disturbance, etc. would seem in the light of our present data that the "common cold," so called, is a heterogeneous group of different conditions presenting similar symptoms but having varied causes. As a matter of fact the common cold in most instances, is the result of infection; but there are many types of colds and many infectious agents responsible for them. Environmental and constitutional factors are often of great importance. "Furthermore, there are many acute inflammations of the upper respiratory tract not primarily due to the local action of micro-organisms, but rather the local expression of chemical or mechanical irritation, or nervous reflexes, of drug intoxications, of constitutional disease, or of anaphylaxis."

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INFANT MORTALITY IN SOUTH CAROLINA

By W. E. Simpson, M. D., Rock Hill, S. C.

It is not the purpose or intent of this paper to discuss the various phases of infant mortality, but merely to call the attention of this Association to some almost unbelievable facts regarding South Carolina's infant mortality as compared with that of all the other states in the United States; and to suggest some ways and means by which we may lower our infant mortality.

Since no state is greater than its people, and since the infants of today are the citizens of tomorrow, the South Carolina Pediatric Association thought it wise to present as its paper before this Society some facts and figures taken from absolutely authoritative sources regarding the shameful position occupied by our beloved South Carolina; namely that of having the highest infant mortality of any state in the whole United States. It is the sincere hope of the South Carolina Pediatric Society that every physician present, and every member of the South Carolina Medical Association will arise to the call and put South Carolina into the position of prominence and respect she occupies in all other lines. May the time soon come when we will be able to preserve more perfectly the most precious gift our loving God ever gave to human kind-Our Babies.

From the United States Bureau of the Cen-

^{*} Read before the South Carolina Medical Association, Anderson, S. C., April 20, 1927.

sus for the year 1924 the comparative figures show that South Carolina's infant mortality was 102 for every 1,000 registered live births. The next nearest state was Delaware with an infant mortality of 95. Maryland was the second nearest at 86, while lowa had the lowest rate at 55. In a survey made in 1923 by the American Child Health Association covering 86 of the most important cities of all the states, we find that Charleston, S. C., the city chosen in South Carolina, had an infant mortality of 150; Charlotte, N. C., 104; Winston-Salem, N. C., 142; Augusta, Ga., 108; Macon, Ga., 102; Pueblo, Colorado, 132; Pasadena, Cal., 34; which was the lowest rate for any of the cities surveyed. South Carolina's infant mortality for 1926 according to the State Board of Health report was 102.3.

Some of the more important causes seem to be:

First: Incomplete and Inaccurate Birth Registration. This seems to be the most outstanding single cause. Since the mortality rate is determined by the number of deaths occuring in 1,000 registered live births, we plainly see that when all the births are not recorded it unfairly raises our mortality rate. This partial cause can be entirely eliminated if the physicians will observe the law and report accurately and promptly all births.

Second: Poor Prenatal Care. Quoting again from the United States Bureau of the Census for South Carolina in 1924, out of 4,816 deaths under one year of age 1,380 or 28.6% were put down as due to prematurity. Here we see clearly that if expectant mothers were carefully looked after, treated, and properly instructed, premature births would at least be cut in half.

Third: Race. While it is true that our infant mortality is some what affected by the percentage of negro population, still according to the Child Health Association survey just mentioned we find Charleston, S. C. with a mortality rate of 150 and a negro population of 47.6%; Winston-Salem, N. C. has a mortality rate of 142 with a negro population of 42.8%; while Macon, Ga., with a mortality rate, of 102 has a negro population of 56.4%. From this we see we cannot excuse ourselves because we have a large negro population.

Fourth: *Midwives*. So far as we can find by a survey of all the counties in South Carolina, there are 5,066 midwives practicing obstretrics in S. C. while only 3,000 of these have had instructions and are registered. This is a very significant fact in that the ignorance and superstition of these 2,066 uninstructed midwives must be responsible for many still births and poorly resuscitated babies. About 80% of the negro and 20% of the white babies are born under the care and supervision of midwives. One midwife reports as many as 57 births in one year.

Fifth: Incompetent Post Natal Care. We all agree that the first days and weeks of a baby's life count for more than any other period, and when a baby comes into the world without intelligent supervision, its chances to live and develop normally are extremely few. The superstitious and time-honored midwife customs are responsible for the death of many babies that survive the hazards of birth, and the first days of life. It is the rule in the midwife class of deliveries that the baby is purged and "tea'd" to the point of almost extinction. Upon this handicap is engrated vicious habits as to feeding hygiene and care. The ludicrous remedies for sore eyes, thrush, hives, etc., are familiar to us all.

Sixth: Lack of Parental Knowledge of Proper Feeding and Hygiene. No branch of medicine has made more rapid strides during the last decade than has the science of infant feeding and hygiene. Still we see every day antiquated and foolish methods used in the feeding and hygiene of children. They are often handicapped from the start by irregular or too frequent feedings, and often deprived from the God-given food-breast milk, and given such placebos as condensed milk, etc. If the average mother could be taught the death dealing consequences of condensed milk alone our infant mortality would be markedly lowered. How often we see in our Sunny South poor, pale little babies whose bodies have never received one single ray of the indispensable sunshine. Ventilation is considered by many a sure cause of death should the baby inhale even one breath of unpolluted oxygenladened air. How frequently we find the poor little baby almost suffocated by the grease

sogged garments that prevent proper radiation from the little body. Many other such errors could be recounted, but they are familiar to us all.

The question now is: "What are we going to do about the shameful position we, the guardians of life in South Carolina, occupy. Time only permits the mention of a few preliminary steps which, we believe, if taken will pave the way to better days for "Young Caroline."

We, as physicians, especially those of us in the general practice must no longer deny the responsibility which is unmistakably ours, and must unite our efforts to make South Carolina a safe place for a baby to be born. We must shoulder the burden in the right spirit, feeling that the responsibility is a personal one, and that we are individually and collectively called upon to perform the task. If we all assume this attitude and discharge our duties faithfully, 1928 will see South Carolina already arisen and gone from darkness into light.

A few suggestions are:

First: Accurate and Prompt Registration of Births. There was passed by the General Assembly in South Carolina in March, 1014, a law requiring the prompt registration of ail births and deaths. The penalty for violation of this law is a fine of not less than \$5.00 or more than \$100.00, or to be imprisoned in the County jail not exceeding 30 days, or suffer both fine and imprisonment at the discretion of the court. The United States government requires that a state must register at least 90% of its births. A survey made of South Carolina by the United States government in 1926 showed that only 86.8% of the births were recorded. This threw South Carolina out of the Birth registration area and gave her a higher mortality rate than was due her. This particular phase of the situation is strictly up to the Obstetrician and the general practitioner. Births must not only be reported but must be reported promptly and accurately by the ninth day of the month following birth or they do not count. Midwives report births more promptly than do some physicians. We understand that some physicians hold these birth certificates sometimes for several months before reporting them. Frequently when cer-

tificates are handed in they are not accurately filled out, lacking often even the date of birth. These careless oversights have the same effect as not reporting at all in so far as the United States Government statistics go. If we as physicians will perform perfectly this one duty 1928 will find us back in the birth registration area with a lowered infant mortality rate. The rate for South Carolina, from 1021 to 1023, while South Carolina was in the birth registration area averaged only 95, while when we failed to register 90% of our births and were thrown out of the registration area our mortality rate jumped up to 102. From these facts we see that South Carolina is being advertised as a state of poor doctors and poor health, while in reality it is largely due to some careless doctors.

Second: Better Prenatal Care. This can be accomplished only by educating expectant mothers how to more intelligently care for themselves during pregnancy. They should have explained to them in detail the effect of proper exercise, diet, fresh air and sunshine and why she should present herself to her physician often that she may be checked over for even the remote symptoms of approaching trouble. Here the physician must travel in the "second mile" and make plain the importance of this prophylactic step. In all cases and particularly suspicious ones a Wassermann and a Kahn test should be done to eliminate syphilis, which is the largest single factor in premature births. The public health nurse is an invaluable aid here as she can, through her various club activities, carry the necessary facts to those women who from lack of funds or false modesty or what not, will not consult a physician. The prenatal clinics under the supervision of a competent Health Nurse, probably offers the best solution of this particular phase of the work.

Third: Elimination of Uninstructed Midwives. The vast number of uninstructed midwives should be eliminated and only those who have taken and passed successfully the prescribed course of the State Board of Health should be allowed to practice midwifery. Here it is choosing the least of evils. Under the supervision of a health unit the death dealing liberties and chances taken by some of the most ignorant midwives can be eliminated. It is a question of what a midwife shall not do and how far she may go without calling in a physician. This particular point has been very strikingly demonstarted in my own county by the very efficient services of our public health nurse.

Fourth: Better Post Natal Care. This point is stressed especially as to infant feeding and hygiene. We as physicians must first inform ourselves according to the latest proven methods and pass the instructions on to the mothers. Not until we have put the baby in the baby's sphere and treated it as a baby can we expect to markedly cut down our death rate. We must also give our little patients the advantage of the newer methods of prophylaxis by showing the parent how much more reasonable it is to prevent disease than to try to cure it.

There are many other suggestions we might offer to reduce our mortality but we believe if these just mentioned are sincerely put into execution, our state will, within a year or two, no longer be looked upon as the state of the "Cross Bones and Skull," but a sunny haven of health where a baby has the right and privilege to be well born and safely reared.

DISCUSSION

Dr. E. A. Hines, Seneca: Mr. President, I think this is one of the most important papers that could possibly come before this association.

About 79 years ago, when this Association was founded, the second thing that was done was to discuss this subject; the first was to discuss the question of higher medical education in South Carolina.

The essayist has presented an admirable resume of the whole subject, giving statistics, rates and suggestions which are certainly wise and will be effective if carried out.

In 1916 I became interested in this subject, and in 1917, after making a trip to Washington and discussing with all the various services there, came back home, and, with the help of our Vital Statistics Bureau, found out where every baby lived practically that died the previous year, and what they died of, including the locality in which I practiced myself. With the help of the public health service we figured out in the locality I practice in, who they were, where they were, etc. My County is Oconee. The rate was 130. I came before this Association and appealed to you to establish a Bureau of Child Hygiene. You cordially supported me and in a very short time one of the splendid bureaus of the State Board of

Health was established and speedily after that South Carolina for the first time was admitted into the registration area for births. I have taken it upon myself to request this Bureau to send its chief representative here to explain to you the workings of the whole thing—the infant mortality of South Carolina, and why it is so high. That is an exhibit on the left as you enter the building. Go there and see it—study it. I am sure you will then be in position to render aid to the essayist and I believe in a short time South Carolina will be reentered into the registration area.

It is not a negro problem at all, nor a South Carolina problem. The question of birth registration—that is a South Carolina problem. We can remedy it if we will. When the physician gets down to business and thinks on these things, something will be done. I feel quite confident that in another year after this has been brought to you so well that we will get back into the registration area.

In conclusion, the lowest infant mortality rate in the world is that of New Zealand, and that is 47%, and it is brought down that low by the activities of the doctors and the public health workers and laymen. All took a hand and concentrated efforts, and we can go a long way in South Carolina if we follow their example.

So, Mr. President, I appeal to the members of the association here tonight: Don't go away from this building until you have given serious consideration to the position South Carolina is in now. I enjoyed the paper very much. It is a tremendously urgent problem and I know we are going to solve it if we will listen to the advice of the distinguished essayist.

Dr. M. W. Beach, Charleston: This subject is one of vital importance to every citizen of South Carolina, but most especially to the members of this Association. For the greater part of the responsibility of this deplorable condition falls upon us, individually and collectively. Therefore, we should be cognizant of these facts and should give due consideration to the many excellent suggestions offered in this paper.

I am not here to render an excuse for the place which Charleston holds in regard to her infant mortality rate. But if you will analyze these figures for the year 1926, I am convinced that you will find a plasuible explanation.

1926	Total	White	Colored
Live Births	_ 1698	836	862
Birth Rate	22.01	20.48	25.88
Still Births	_ 187	32	155
Deaths under 1 year_	_ 227	57	170
Infant mortality rate	е,		
per one thousan	d		
live births	_ 133.6	68.18	197.21

Total Number Deaths			
under ten years			
based on Population			
July, 1926	4.31	1.91	7.26
Causes of Infant De	aths.	(Under 1	year).
Colitis	26	3	23
Respiratory diseases_	35	8	27
Premature births	63	18	45
Congenital debility	42	3	39
All other causes	61	25	36

Dr. L. A. Hartzog, Olar: We all realize the importance of instruction on prenatal care. We also realize the fact of the incompetency on the part of midwives in giving this instruction. Some time ago a pamphlet on prenatal instruction came under my supervision from one of my patients sent by a friend from another state that furnished these pamphlets to expectant mothers. That showed the effects it was having—that they were so much enthused that this mother sent it on to one in this state. I think it would be a good idea if our State Board would print similar pamphlets and place them in the hands of midwives to give the expectant mothers.

Dr. Ben Wyman, Columbia: The State Board is doing that—pamphlets are going out by the thousands.

The fact is that the midwives do report better than the doctors, as shown by those charts out there. I want to say in reference to Dr. Simpson's paper, the fact is the babies are dying in South Carolina and dying by the thousands. We have lost over 50,000 babies in ten years.

Dr. T. L. W. Bailey, Clinton: In reference to one thing that has come under my observation in regard to midwives, I would like to make a few remarks.

I believe if local physicians were to take an interest in one little thing I don't believe it would give any physician any trouble and would be a great help to the midwives. I am registrar for my district and I became interested in this mortality of midwives, and I have ten midwives in my territory. I gave notice to them that if they would come to my office at a certain time I would give a series of obstetrical lectures. They came, and came regularly. I am sure that that little work did a great deal of good because they were practically instructed—instructed in such a way that these poor, ignorant midwives could understand. We are having too many midwives: Eight ignorant women in one locality waiting on women in confinement is too much. I wish this association could give authority to the local man at home they would cut down the number of midwives and have them to take a series of practical lectures and instructions four or five or six times a year, and keep these especially prepared, you might say, under the doctors of that locality, I believe we would get better results as a general thing throughout the state.

And I believe if we had a system of authority to cut the number of midwives down, it would be a great advantage. Out of the ten, eight of these women gave reports of deliveries during the year. The combined of course almost equally what the practitioners of that district were doing. I think it is well worth thinking of and I think if the home man would take enough interest just to bring their midwives together occasionally and give them, say, four series of lectures in a practical way and teach it to them in such a way that they could understand it, it would be helpful to the State of South Carolina.

Dr. E. E. Epting, Anderson: The State Board of Health has today the midwife in forty of the counties already. They are covering this work by midwife instructors and in every county where they have county health units the work is being carried on. In forty counties all of the midwives have been instructed.

Dr. DeWitt Kluttz, Greenville: I think a good idea would be to have the Association pay onehalf, the County one-fourth and the State onefourth to keep a negro nurse and a white nurse just to look after expectant mothers. The midwives were put through the same examination mentioned. The County Commissioners passed a law that made the midwife come in for examination and if they did not take it, they were put out. If they expected trouble they had to report it to this nurse and she went to examine the cas and, if she saw it was necessary, turned the case over to a doctor. If the doctor handled the case this allowed \$12.50 for him to look after the case. This small amount kept it from being a charity patient.

Dr. Herron, Greenville: I am glad Dr. Simpson impressed on us the importance of this matter.

I wonder if the difference in our prenatal care—what part it has played in our new rating. Last week we got a new rating from the Child Welfare Association, and we got a rating of 80. At the same time our infant mortality has dropped off about one-half of what Charleston's infant mortality rate is. It is striking the increase in prenatal care and decrease in infant mortality. Pay more attention to our prenatal care. I don't think we have had a midwife registered in our town in the past two years.

Dr. W. E. Simpson, Rock Hill: I just thank these gentlemen for their discussion of this paper.

I want to say Dr. Beach very ably defended

the City.

These statistics were for 1924: I just took the U. S. Census Bureau's report for 1924. I am glad Dr. Beach told us we are doing very much better down there.

CAUSES AND COMPLICATIONS OF GALL BLADDER INFECTIONS

By DeWitt Kluttz, M. D., Greenville, S. C.

Among the greatest additions to modern medicine have been those brought out by American physicians in the past several years. Foci of infection as the seat of so many of our ills; the cause and thence the remedy of diabetes; and the more recent knowledge of gall bladder, liver and gastro-intestinal disorders accumulated through study of the cholecystograph. All are somewhat related, and studies of each adds something to our knowledge of the other. The thought and research points in physiology, both normal and abnorthat has been stimulated, has presented many mal.

The skepticism, usually meeting new medical ventures was soon overcome in the earlier of these when we began to see our patients benefitted and unharmed. The purified Tetraiodophenolphthlein now on the market is practically devoid of reaction in intravenous administration, and the operative check of finding, together with more happy patients have, in a short time, furnished us with almost infallible criteria for interpretation of the radiographs. In this method we have a means not only of substantiating the clinical finding in typical gall bladder cases, but of locating the cause in many vague cases of indigestion that have often failed to get relief by a first operation. The cholecystograph furnishes us pre-operative diagnosis of a diseased liver and gall bladder which the examining finger and eyes of the surgeon can easily pass as normal, especially after a diseased appendix has been attended to.

Taking the gall bladder and liver as a pivot,

it can be shown that abdominal lesions in general are primary or secondary foci and that one organ is often infected from the other. Symptoms may be due to several, or again they may be referred to an innocent part through the reflex nervous innervation,—the mechanism responsible for clouding many diagnoses. For instance, probably 10% stomach symptoms are attended by pathology in that viscus. For the sake of brevity, symptoms will be given no further mention.

Let us look into some experimental data brought out by physiologists since the birth of this idea by Graham in 1923. Some new points in anatomy and physiology have been given us and older ones clarified. In previous years the "torpid liver" and attending biliousness, as indicated by the coated tongue, and its calomel therapy was a most important part of the armamentarium of the practitioner. After a period of more or less obscurity it is at present the most investigated part of the anatomy. Important as a secretor for digestive needs and as a storage plant for excess blood sugar; long recognized as a detoxitizer of products of intestinal putrifaction, such as skatols and indols; as important in forming nitrogenous wastes into Urea and Hippuric acid for excretion, and in separating the usable from the useless parts of physiological erythrocytic deteriation. Situated near the zero region of the blood pressure system and affording a shallow pool, as it were, for the blood brought to it, blood bourne bacteria find a most favorable lodging place. Caring for these is another of its important function. Before considering the further progress of such emboli, their damage to liver tissue and its effects, some date on the source of this infection will be helpful.

That thrombi are often carried to it from the abdomen is seen in Wilkie's work. Hemorrhagic spots were found in the liver in 50 per cent of his animals in which ligation of omental veins was done. Many infections find their way into the liver and thence to the gall bladder, in much the same way as typhoid which has a predelection for this part; for distant foci over the general circulation, or, more often, through the portal system from various parts of the gastro-intestinal tract. The superior or mesen-

^{*} Read before the South Carolina Medical Association, Anderson, S. C., April 20, 1927.

teric branch of the portal drains the appendix, ascending and proximal transverse colon, duodenum and small intestine. These together with the gall bladder are the organs in which the majority of our surgical infections occur, and they are situated mostly in the right abdomen. The cystic vein unites with the right division of the portal and sends its blood to the right lobe. Serene shows by Chinese ink injections that the blood from the superior mesenteric branch flows mostly to the right lobe while that from the inferior mesenteric branch finds its way to the left lobe. From the foregoing we may assume that the right lobe stands more chance of becoming infected. Elliason and Pancoast in their series of right lobe liver abscesses following appendicitis give clinical proof of this.

The lymphatic route seems to bear out the same point. Occasionally a retrococeal appendicular abscess reaches the surface of the right side of the liver by a retro-colic cellulitis. Kodama in a preliminary report shows by dye injection that the lymphatic drainage of the appendix, caecum, beginning ascending colon, first portion of duodenum, gall bladder, and most of the liver is to the node situated at the beginning of the portal vein, while that from other parts of the G-l tract goes to the lumbar nodes. Infection brought to this portal node may easily spread to the portal vein and thence into the liver. He also finds a to and from connection between the first duodenum and gall bladder. This allows for a direct infection of the gall bladder from a duodenal ulcer, whereas the most common source is from disease in the adjacent liver, there being a to and fro lymphatic system between the adherent walls of the two. Through this and the cystic vein a vicious cycle for infection is maintained between the gall bladder and right lobe.

The beginning of this infection in the gall bladder is well beneath the mucosa and is typified by a varying amount of fibrosis and a proportionate loss of elastic fibers. This chokes the lymphatics and interferes with its most important function—that of concentrating a large amount of bile salts into a small volume by draining off the excess fluid constituent. Usually varying degrees of this interstitial cholecystitis is met with; from that with a dense shrunken wall and constricted or blocked opening, to the

other extreme in which the gross appearance is is practically normal. Microscopically the latter show only slight change, but in either case a small section from the liver side of the area shows the justification of the operation. This infuection in the adjacent liver, gall bladder wall serves as a focus. Hyde shows that much infection can be eliminated with only resultant necrosis and healing fibrosis. Healthy cells can do several times their work, and hypertrophy compensates for much. Herringham has collected at autopsy a number of complete atrophies of the left lobe from calculus blocking its main duct, there was hypertrophy of the other part. No signs or symptoms had been noted by the subject. The livers of many can withstand much less, and eventually there is less hepatic tissue than can properly attend to its various functions. The body suffers from inefficiency of certain metabolic processes, and from retention of waste products. The functional disturbances in the gastro-intestinal mucosa may become organic and may fail to be restored to normal after a long delayed operation.

The involved lymphatics are close to the peritoneal coat and extension to it is common, resulting in adhesions to neighboring structures and a network of channels for the flow of infected lymph. More or less obstruction to the phlorus or duodenum, or even a duodenal ulcer may be the outcome. In a similar way an ulcer may be the cause of such adhesions and the instigator of a cholecystitis, or an ulcer may constrict and contaminate the common duct. Inflammation confined to the mucosa is not usual. That the acute catarrhl cholecystitis and cholangitis from extension of a duodenitis up the duct lumen is of this nature is indicated by the ready response of early cases to medical treatment. Unconquered emboli may reach the deeper coats directly through the lymphatics or by way of the liver, and the surgical condition develop. In extension from a diseased liver through the main ducts causing a chronic catarrhl cholecystitis there is probably a conincident spread directly to the tissue beneath the mucosa. The swelling and edema accompanying common duct obstruction by calculus is superimposed on a preceding deeper condition.

Diabetes, from a complicating pancreatitis,

while not as frequent in our gall bladder cases as reported by some, is not unusual. The route of microorganisms from the gall bladder may by systemic; though lymph channels in adhesions of the viscus or of the common duct to the head; back flow of bile up the pancreatic ducts may be the cause. Deficient glucose storing power of an impaired liver likely plays a part.

An attempt has been made to explain anatomally the susceptibility of the gall bladder to infection and the ease with which neighboring parts are affected. Belated recognition of any abdominal foci, and incomplete eradication leads to more extensive and more damaging pathology.

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DISCUSSION

Dr. Frank R. Wrenn (Anderson): In regard to that Graham test, I think it is a very valuable

method of diagnosis. It is quite simple. I would not call it bad—some of the cases I have had—but I have had some very discomforting ones. I have had one or two patients very much distressed. Have never had many dangerous or alarming ones, but the patient was quite uncomfortable.

Recently I have been making my own capsules and find them very much superior to the manufactured capsule.

Within the past month or two I have been using the method (I can't think of the name—his name) but he has been using the dose in cereal. It is practically tasteless, in cream of wheat, milk and sugar. I think that method should always be used previous to the intravenous injection. I have had no bad results. I had one patient a little nauseated; but outside of that I had no trouble at all. I believe it is a thing very much worth while.

Dr. DeWitt Kluttz (Greenville): In our administration of intravenous injections I would not say that we have not had any reaction, but it is practically nothing at all. The drug has been so purified, and is used in double distilled water, that I would not hesitate to give that to anyone.

Dr. T. B. Reaves, Greenville:

The question about seeing pathology is right. I think we are going to have still better surgery since we will be able to help them a little on the diet test.

NERVOUS AND MENTAL DISEASES

By E. L. HORGER, M. D., Columbia, S. C.

DEMENTIA PRECOX:

Dementia precox is a mental disorder usually occurring early in life in which there is a progressive deterioration; however, in some cases there may occur a remission. With the majority of cases in the early stages of the disease the mental faculties are greatly reduced. Blueler considers the splitting of the personality or psyche the main symptom of the disease, therefore the condition is often called schizophrenia instead of dementia precox.

It is one of the most frequent mental disorders encountered in hospitals for the care of the insane. According to the U. S. Bureau of Census of the Year 1922, it heads the list in number of patients found in the classification with reference to psychoses. Of the total number of patients admitted to the S. C. State Hospital during 1927, 22 per cent were diagnosed as cases of dementia precox. It is more prevalent among men than women and develops more often in urban districts than in the rural.

Dementia precox can not be accurately defined but the following are some of the symptoms of this type of mental disorder. These individuals are more or less seclusive and their feelings and instincts as a rule are abnormal. In general there is a lack of interest on the patients' part. There is discrepancy between thought and emotion. Patients become very indifferent, act in a silly manner and show emotional deterioration. Often in the beginning of this condition they have various physical complaints to make. They become suspicious, at times develop ideas of reference and are impulsive. They may develop peculiar feelings, may complain of something interfering with their minds and insist that they are not

natural. In all other fields they may appear to be perfectly clear.

Schizophrenia or dementia precox is divided into the following types: simple, hebephrenic catatonic, paranoid and, according to the claim of some authors, a "mixed" form. The characteristic symptoms of each group may be summarized briefly in this manner.

Simple—"There is a defect of interest, a gradual development of an apathetic state, often with peculiar behavior but without expression of delusions or hallucinations."

Hebephrenic. "Patients show prominently a tendency to silliness, smiling, laughter, grimacing mannerisms in speech and action and numerous peculiar ideas, usually absurd, grotesque and changeable in form."

Catatonic. "There is a prominence of negativistic reactions or various peculiarities of conduct with phases of stupor or excitement, the latter characterized by stereotype behavior and usually hallucinations."

Paranoid type. "It is characterized by a prominence of delusions, particularly ideas of persecution or grandeur, often connectedly elaborated, and hallucinations in various fields."

In regard to prognosis, some cases appear to recover. A few cases may improve sufficiently to leave the institution and become able to adapt themselves to the outside world, while some are able to get along out of the institution only under a certain amount of supervision. In the majority of the cases there is a progressive mental deterioration which, if the patients live long enough, will develop into a complete dementia. Although recovery is rarely assured, patients, generally speaking, live for years so that the outlook as to continuance of life may be said to be good.

EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

Dr. Edward B. Heckel in the Archives of Opthalmology gives a treatment of Sympatheic Opthalmia that emphasizes the value of protein therapy if used in form of Diphtheria Antitoxin. We are all familiar with the use of Sod. Salicyl. in large doses in this condition but in his case reports he uses Sod. Salicyl. without benefit. He did not, however, give in what dosage.

Verhoeff has suggested the use of Diphtheria Antitoxin in massive doses. It was used in doses of twenty thousand (20,000) units daily for four days in a case nineteen years old. This case had had a few smaller doses previously.

Another case, age six years, had ten injec-

tions of five thousand (5,000) units daily.

And another, age eleven years, had twenty thousand (20,000) units daily for seven doses. In all the cases there was benefit even though the vision was still reduced, but there was no doubt of the vision improving in all cases from 2/200 to 6/200, and from 5/200 to 20/200 and in the very young cases there was improvement but not being able to read it was hard to measure.

This paper of Dr. Heckel has points in two cases that I have recently seen, and in wondering if the sterile milk injection would be effective in this type of condition.

Dr. W. A. Fisher uses protein therapy in the treatment of sympathetic opthalmia in this way.

WOMAN'S AUXILIARY South Carolina Medical Association

OFFICERS

Mrs. H. M. Stuckey, Sumter, S. CPresident
Mrs. W. H. Nardin, Anderson, S. C First Vice-President
Mrs. I. H. Grimball, Greenville, S. CSecond Vice-resident
Mrs. Frank Wrenn, Anderson, S. CRecording Secretary
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Mrs. Ben Wyman, Columbia, S. CSecond	District
Third District to be Appointed.	
	District
Mrs. W. J. Dunn, Camden, S. C Fifth	District
Mrs. E. M. Hicks, Florence, S. CSixth	District
Mrs. Carl B. Epps, Sumter, S. CSeventh	District
Mrs. L. A. Hartzog, Olar, S. CEighth	District

EXCERPTS FROM NEW BULLETIN WOMAN'S AUXILIARY A. M. A.

To the Members of The Woman's Auxiliary GREETINGS

Wishing-

Success for your husband
Joy and happiness for you
Glory and honor to our profession
Good will among all.

Jabez N. Jackson, M. D., President American Medical Association.

The Woman's Auxiliary of the American Medical Association has already demonstrated its great usefulness. The things accomplished are a warrant of still greater results in the future. Much of the success of Hygeia is due to its efforts. The leaders are to be congratulated on their enthusiasm and their tact.

Morris Fishbein, M. D., Editor of the Journal of the American Medical Association and Hygeia.

South Carolina was one of the pioneer states to organize a Woman's Auxiliary to the South Carolina Medical Association, which it did at Charleston, during the Diamond Jubilee of the State Medical Association, about five years ago. The movement has now taken on tremendous importance and the members of the State Medical Association acknowledge very freely the wonderful possibilities of co-operation in the promotion of public health, social contact, and higher ideals of medicine.

At present the Woman's Auxiliary is actively engaged with every prospect of success in furthering a plan to erect a memorial to Dr. J. Marion Sims, a Native of South Carolina, who became one of the world's greatst surgeons. We wonder now how we ever got along without a Woman's Auxiliary.

E. A. Hines, M. D., Secretary, State Medical Assn., Seneca, S. C.

There was a time in the distant past when woman was a mere slave and chattel of man. But civilization brought to man a realization of her virtues, her grace, her depth of love and sacrifice and her tremendous power for good as the helpmate of the individual and the mother of the race.

Many years ago Confucius wrote, "Woman is the Masterpiece." Lambertine wrote, "There is a woman at the beginning of all great things,"

The dictionary definition of Auxiliary is "Serving as an

aid, support or help." It gives me pleasure to endorse, in the fullest measure, the splendid "Aid, Support and Help" the Woman's Auxiliary has afforded the American Medical Association.

> William R. Bathurst, President, Southern Medical Association.

Benjamin Franklin said that man without woman was like a single blade of a pair of scissors. Certainly an organization of men can accomplish its purpose more effectively if aided by a group of loyal women.

I heartily endorse the Woman's Auxiliary of the American Medical Association, as I believe it has a broad field for valuable social, philanthropic and educational work.

Stuart McGuire, M. D.,

Richmond, Va.

AN APPRECIATION OF MARION SIMS BY DR. WILSON

(An appreciation of Dr. J. Marion Sims from the standpoint of a physician; by Dr. Robert Wilson, dean of the Medical College of South Carolina. Dr. Sims was a student of this institution.)

By Dr. Robert Wilson (Columbia Record)

Only a few have been able to leave behind them as brilliant a record of beneficent achievements as was left by Marion Sims. In the opinion of Dr. T. Gilliard Thomas, who became eminent in the specialty created by Dr. Sims, he was one of the three men "who, in the history of all times, had done most of their fellow men." This is a high estimate, but it seems none too high when we call to mind the great and far-reaching blessing which his introduction of a simple instrument has conferred upon mankind, not only upon those who have experienced directly the relief from suffering which its use enabled them to obtain, but upon thousands of others who have profited by the advancement of our knowledge of diseases of women.

Sims gave no indication in his youth of the possession of those talents which gained for him before his death the reputation of being the greatest of American Surgeons. This reputation was not attained easily, but it was through trial and hardship and bitter opposition that by force of his industry and genius, he won his way to recognition and to fame. Failure after failure was encountered in the early years of his career, but consicous of his own powers he knew that success must reward persistence. And so it proved.

Sims is known best as the founder of modern gynecology, but he was a general surgeon of rare ability as well. Original in conception and bold in execution. Had he not opened up a new field by his discovery of the speculum, he still would have achieved fame as a great surgeon.

It should be a source of pride to us in South Carolina, not only that he was a native of our state, but also that his latent genius received its earliest stimulus in our own medical school where he took his first course of lectures. The teachings of one of his professors here, Dr. Prioleau, gave him the suggestion of proceedure whose application revealed to him possibilities never dreamed of by others. It is significant that in the school where he began the study of medicine the students, in appreciation of the greatest of South Carolina's sons, have kept his name fresh in the "Marion Sims Society" where his memory is still a living influence to inspire men with higher ideals of character and professional attainment.

DR. DOUGLAS PAYS TRIBUTE TO SIMS (Columbia Record)

No other alumnus of this institution has served humanity more nobly and enduringly than Dr. J. Marion Sims. The work that he did lives everymore after him. He graduated at the South Carolina College in 1832, always held his alma mater in loyal affection, and left in his memoirs an interesting and valuable account of his student days on her historic campus. The University of South Carolina has on the long roll of her sons the names of many eminent members of his profession, But Dr. Sims was incomparably the greatest surgeon she has ever His alma mater treasures his international fame, as well as the glorious contributions he made to medical science for the relief of suffering and the cure of disease. The University heartily endorses the movement to establish a fitting memorial to Doctor Sims, and has full faith that his fellow South Carolinians will delight to do honor in this way to one of the most illustrious sons of the old Palmetto State.

> D. M. Douglas, President of the University of South Carolina.

MRS. DUNN WRITES OF 'HYGEIA' (Columbia Record)

My task is to introduce to you a magazine which in all probability you have seen, but in all probability you have not taken the meeting scriously. Hygeia was the daughter of Aesculapius, and it is fitting that the little magazine published by the American Medical Association for the laymen should be called Hygeia.

There is no way that I know of better to disseminate the present knowledge of health and preventative medicine than to place a years subscription for Hygeia, and may I plead with the auxiliary that they read Hygeia themselves and place it in the hands of those doubters who are always striving to counteract the good that medicine does.

Mrs. J. R. Dunn, Chairman.

REPORT OF THE JANUARY MEETING OF THE WOMAN'S AUXILIARY GREENVILLE COUNTY, SOUTH CAROLINA MEDICAL ASSOCIATION

On Monday afternoon January 9, the auxiliary of the Greenville County Medical Society had a most enjoyable meeting in the attractive new home of Mrs. J. G. Murray.

As this was the last meeting of the year, the annual reports from the various officers and chairman were heard with interest. A resume of the year's work showed much had been accomplished. A rising vote of thanks was given the president, Mrs. I. H. Grimball, in recognition of the credit due her, for with enthuiasm, efficiency and tact, she has promoted the work.

The officers elected for the ensuring year were as follows: President, Mrs. Willard C. Hearin; vice-president, Mrs. I. H. Grimball; recording secretary, Mrs. Irving S. Barksdale; corresponding secretary, Mrs. J. Warren White, treasurer, Mrs. T. R. W. Wilson.

The auxiliary was one year old January 10th, so in honor of the day, a birthday party was arranged, each member having been requested to bring five cents for each year of her age, the money to be devoted to the Marion Sims Memorial. Twenty-eight dollars was realized making a total of \$225.00 from Greenville County.

After adjournment informality reigned, and games were entered into with zest and merriment.

The refreshments were in keeping with the day. On each plate with a cup of hot punch and cheese straws, was a wee frosted cake bearing a tiny lighted candle.

NEWS FROM THE FIRST DISTRICT

The Councillor of the 1st district made a successful visit to Walterboro, in interest of the Auxiliary.

She was entertained at the home of Mrs. L. M. Stokes. A small group of Physicians' wives were present and showed marked interest in the aims and purposes of the Auxiliary.

The Charleston County Medical Auxiliary held its regular meeting at the home of its President Mrs. A. E. Baker, Sr. Three new members were welcomed. Plans were discussed regarding a Bridge Party to be held on the 27th of January in order to raise funds for the Sims Memorial. A letter from the Trustees of the Medical College was read, recommending that a wing to the Medical College of the State of South Carolina be erected in honor of J. Marion Sims. This was highly approved of. For what would be more fitting than to have a building devoted to research, under the name of J. Marion Sims, who accomplished so much by research.

After the business session was concluded a light luncheon was served. This was followed by the worst feature of all, adjournment.

Mrs. W. G. Gamble, Jr., Councillor First District, Charleston, S. C.

WOMAN'S AUXILIARY OF MEDICAL SOCIETY MEETS

EASLEY, Feb. 4-(Special)-The first annual meeting of the Woman's Auxiliary of the Pickens County Medical Association was held Wednesday at the home of Dr. and Mrs. J. L. Bolt. The doctors that make up the medical group of the county were special guests and a lovely four course luncheon was served at 1 o'clock. The luncheon table presented a pleasing appearance with its centerpiece of red geraniums, red tapers and red baskets filled with nuts. Place cards suggestive of Valentine were very attractive. Music by Mrs. Barr and Mrs. Woodruff was enjoyed during the luncheon hour. When the luncheon had been served, the doctors repaired to Dr. Bolt's office where they held a conference. The Woman's Auxiliary then had a business meeting at which time officers for the coming year were elected as follows: President, Mrs. Peden Woodruff; vice-president, Mrs. J. L. Bolt; secretary and treasurer, Mrs. J. W. Potts; press reported, Mrs. J. L. Jameson. The program committee consists of Mrs. Peek of Six Mile, Mrs. Sheldon of Liberty, Mrs. Clayton of Central, and Mrs. Potts of Easley; Mrs. Pepper of Easley, Mrs. Bryson of Liberty, Mrs. Tripp, Mrs. Furman and Mrs. Bolt of Easley, make up the social committee. When the yearly reports had been read the auxiliary was adjourned.-Greenville News.

On January 20, a very enjoyable party was given b, the woman's Auxiliary of the Sumter County Medical Association at the home of Dr. and Mrs. C. P. Osteen, in honor of the graduate nurses and the student nurses of the Tuomey Hospital. The doctors were also among those present.

Mrs. D. O. Winter sang two solos: "Mammy's Song", by Harriet Wane, and "The Lilac Tree," by George H. Gantlan, with Mrs. H. M. Stuckey accompanist. The nurses also sang several popular pieces. Each doctor was called upon to tell his best joke. Many games were played, after which a delicious salad course, with hot tea and coffee was served.

Mrs. D. O. Winter, Publicity Chairman.

SOCIETY REPORTS

PROGRAM FOR THE MEETING OF THE SOUTHERN SECTION OF THE AMERICAN LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL SOCIETY HELD IN GREENVILLE, S. C., SATURDAY, JANUARY 28, 1928, AT 9:00 A. M.

Meeting place—directors' room, Chamber of Commerce Building.

Opening session 9:00 A. M.

Informal remarks by the Chairman of the Section, Dr. J. W. Jervey, Greenville, S. C.

Address—By Dr. J. F. Barnhill, President American L. R. & O. Society.

Osteomyelitis of the Frontal Bone—Report of two cured cases. By Drs. J. J. Shea and R. E. Semmes, Memphis.

A Group of Sinus Cases Presenting Interesting Cranial Symptoms. By Dr. Edward A. Looper, Baltimore.

Some Clinical Observations on the Eustachian Tubes. By Dr. Dunbar Roy, Atlanta.

Some Mooted Points in Sound Conduction and Perception During the Course of Chronic Progressive Deafness (lantern slides). By Dr. Francis P. Emerson, Boston.

The Effects of the Food Elements upon the Special Senses (by invitation). By Dr. William Weston, Columbia, S. C.

The Clinical Effect of Improper Feeding on the Special Senses and Nasal Accessory Sinuses. By Dr. J. A. Stucky, Lexington, Ky.

The Silent Tonsil—Its Relation to Albuminuria. By Dr. Clarence Porter Jones, Newport News, Va.

Laryngeal Stenosis. By Dr. J. M. Woodson, Temple, Texas.

Report of a Case of Psychic Aphonia. By Dr. T. E. Oertel, Augusta, Ga.

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SOCIETY HELD IN THE DIRECTORS' ROOM OF THE CHAMBER OF COMMERCE, MONDAY, JANUARY 2ND, 1928.

The meeting was called to order by the President, Dr. P. Joseph Johnston at 8:30 P. M., after the members had enjoyed a delightful supper in the Chamber of Commerce Grill served by Mesdames Hearin, Murray, Grimball, Wilson, Mauldin and Barksdale of the Auxiliary. About twenty-five members were present.

The minutes of the last meeting were read and approved.

Reports of clinical cases were then called for

by the President. Dr. McCalla reported a case of cerebral haemorrhage following an automobile accident followed by death in three or four hours. Dr. Kluttz reported further on this case.

Dr. Sanders reported a case of mastoiditis in a girl fourteen years old in whom the tonsils had been previously removed. Left ear discharged shortly after the tonsillectomy followed by mastoid involvment from which pus burrowed into the tissues of the neck. X-ray revealed a diseased mastoid. Recovery followed.

Dr. Hugh Smith reported a case of dropsy treated with Novasurol in 1-2 cc. doses every 4-6 days with some improvement although tapping had to be resorted to, however, Dr. Smith further stated that the patient was gradually going down hill. Dr. Pollitzer discussed this case.

Dr. T. B. Reeves was then called upon to make the address of the evening, and we enjoyed a very able discussion on "Goitres."

Dr. Reeves first discussed the physiology of the thyroid, and then proceeded to give Plummer's Classification of Goitres, which is as follows:

- (a). Colloid.
- (b). Adenomatous.
- (c). Exophthalmic.
- (d). Normal enlargements due to menstruation, pregnancy, puberty, and the menopause.

A differentiation must be made between colloidal goitres and exophthalmic. Diagnosis of exophthalmic goitre depends on the symptoms such as dyspnoea, tachycardia, fine tremors, symmetrical enlargement, etc.

Dr. Reeves called attention to the necessity of operating on the large substantial thyroids with local anaesthesia stating that general anaesthetics are apt to paralyze the accessory muscles of respiration. He also stated that it was important to tie off all bleeding vessels and to make sure that no ligature is placed around the recurrent laryngeal nerve. In doing large thyroid operations it is always well to be ready to perform tracheotomy the indications for which are as follows: dyspnoea, ligation of recurrent laryngeal nerve, and post-operatively gradual pressure of a clot on the trachea is an indication for tracheotomy. A laryngologist should be asked to look at the condition of the vocal cords before operation. In thyroid operations a small amount of thyroid tissue around the posterior thyroid capsule should be preserved, by so doing the parathyroids are spared and post-operative tetany will not develop. In event the parathyroids are removed the symptoms arising from the parathyreopriva must be combatted with CaC12 and parathyroid extract.

Post-operative Treatment:

1. Rest in bed. 2. Force fluids. 3. No narcotics, to old patients especially. 4. Atropine is contraindicated as it dries up secretions and renders expectoration more difficult. 5. Post-operative pneumonias should be constantly guarded against. Discussed by Dr. Carpenter; closed by Dr. Reeves.

Under the heading of new business, Dr. Hugh Smith submitted his report on the condition of the Treasury.

Dr. Carpenter moved that Dr. J. F. Simmons be elected a member of the Society; seconded and unanimously carried.

Dr Curran B. Earle moved that the Secretary write a letter of sympathy to Mrs. S. J. Taylor expressing the Society's regret at Dr. Taylor's passing on December 20th, and that a page be ascribed and dedicated in the minute book to the memory of this esteemed member; seconded and carried.

A communication from the local Directory Co. was read by the Secretary who requested the Society to express their wishes in this matter. After some discussion, Dr. Hugh Smith moved that the Society go on record as disapproving such a medical directory; seconded and carried.

An application for membership in the Society from Dr. T. B. Clegg was brought up. Dr. Carpenter moved that the application be referred to the Board of Censors; seconded and carried.

Dr. W. L. Bates moved that the Secretary write Mr. Chas. Stevens of Parke, Davis and Co. and express the Society's appreciation for his excellent programme of December 5th; seconded and carried.

There being no further business the meeting adjourned.

Irving S. Barksdale, M. D., Sec.

PROGRAM FOR THE MARLBORO COUNTY MEDICAL SOCIETY ANNUAL NEW YEAR'S MEETING AND BANQUET HELD THURS-DAY AFTERNOON, JANUARY 12, 1928, AT 4:45 O'CLOCK, BENNETTESVILLE, S. C.

1. Practical Observations on the Trend of Modern Medicine and What it Means to Us in South Carolina, Dr. E. A. Hines, Secretary S. C. Medical Association, Seneca, S. C. Discussion opened by Dr. J. A. Norton, Conway, S. C.

2. (a) Matters Pertaining to the South Carolina Medical Association, (b) Upper Respiratory Infections in Children. Dr. D. L. Smith, President S. C. Medical Association, Spartanburg, S. C. Discussion opened by Dr. W. C. Davison, Durham, N. C.

3. The Plans for the Duke University School of Medicine, Dr. W. C. Davison, Dean, Duke University Medical School, Durham, N. C.

4. The Relationship of the Female Sex Hormone to the Onset of Labor, Dr. M. Pierce Rucker, Richmond, Va. Discussion opened by Dr. Oren Moore, Charlotte, N. C.

Dinner in Banquet Hall.

5. Some Medical Aspects of Hyperthyroidism, Dr. Wm. H. Higgins, Richmond, Va. Discussion opened by Dr. J. H. Gibbes, Columbia, S. C.

6. General Considerations about Surgery of the Thyroid Gland, Dr. LeGrand Guerry, Columumbia, S. C. Discussion opened by Dr. D. L. Maguire, Charleston, S. C.

7. Infections of the Maxillary Sinuses, Dr. M. R. Mobley, Florence, S. C. Discussion opened by Dr. D. W. Green, Mullins, S. C.

The following names and addresses appear in the registration book:

Richmond-M. Pierce Rucker.

Charlotte-J. M. Northington, J. P. Matheson, Oren Moore, W. P. Biggart, J. P. Monroe, Alonzo Myers, A. A. Barron.

Monroe-A. F. Mahoney, R. H. Garren, J. J. Goudelock.

Hamlet-W. C. Terry, W. D. James, A. W. James, M. A. Hatcher, H. J. Kinsman.

Rockingham-T. B. Henry, A. C. Everett, W. P. Webb, A. B. McCreary, F. B. Garrett, J. M. Ledbetter, C. O. Bristow.

Laurinburg-Peter John, E. A. Erwin.

Maxton-J. O. McClelland.

Red Springs-H. H. Hodgin.

Rowland-J. McN. Smith.

Gibson-E. A. Livingston.

Durham-W. C. Davison.

Fayetteville-J. F. Highsmith, G. C. Stone, R. L. Pittman, R. A. Blakey.

Spartanburg-D. Lessene Smith.

Seneca-E. A. Hines.

Columbia-LeGrand Guerry, G. H. Bunch, G. B. Carrigan, R. G. Hamilton, B. F. Wyman, M. H. Wyman, P. V. Mikell, J. S. Fouche, J. H. McLeod. Charleston-D. L. Maguire, W. C. O'Driscoll,

L. A. Wilson, T. E. Bowers.

Kingstree—B. M. Montgomery, T. S. Hemingway, R. W. Sease.

Sumter-C. B. Epps, Milton Weinberg, C. J. Lemmon, H. L. Shaw, J. R. Dunn.

Summerton-W. H. Carrigan.

Manning-T. J. Davis.

Camden-C. A. West.

Kershaw-W. B. Turner.

Timmonsville-E. A. Simmons.

Mt. Croghan-Madge Baker Gaskin, J. S. Gaskin.

Ruby-R. M. Newsom.

Chesterfield—C. A. Bolt.

Florence-J. T. Howell, E. M. Allen, S. R. Lucas. M. R. Mobley, F. K. Rhodes, J. F. Davenport, W. L. Ramseur, James McLeod.

Hartsville—J. L. Powe, William Egleston, W. L. Bylery.

Johnsonville-A. G. Eaddy.

Scranton-C. H. Pate, H. M. Graham.

Conway-J. A. Norton.

Bishopville-H. M. McLure.

Marion-E. M. Dibble, Z. G. Smith.

Mullins—F. L. Martin, D. W. Green, H. B. Webb, R. B. Stith.

Loris-J. D. Thomas.

Bethune-E. Z. Truesdell.

Darlington—A. B. Hooton, C. C. Hill, J. T. Coggeshall, G. B. Edwards.

McColl-F. A. Blanchard, J. C. Moore.

Clio-C. C. Craft, C. S. Evans.

Blenheim-C. D. Napier.

Bennettesville—William Evans, Jr., Douglas Jennings, P. M. Kinney, L. R. Kirkpatrick, C. R. May, T. H. Smith, D. D. Strauss.

D. D. Strauss, M. D., Sec., Bennettsville, S. C.

FLORENCE COUNTY MEDICAL SOCIETY MEETING

The regular monthly meeting of the Florence County Medical Society was held Tuesday night, December 13, 1927 in the directors' room of the Y. M. C. A. at 8 p. m. at which time a delightful chicken supper was served.

After supper the regular business of the Society was entered into. Dr. C. T. Bullock of Timmonsville and Dr. C. L. Guyton of Florence were voted in as new members of the Society. Dr. M. R. Mobley moved that a Committee be appointed to revise the Constitution. Dr. L. M. Lide, President, appointed the newly elected officers on this Committee. There being no further business the election of officers for the ensuing year was entered into which resulted as follows:

President—Dr. E. A. Simmons, Timmonsville,

Vice-President—Dr. Jas. McLeod, Florence,

Secretary-Treasurer—Dr. E. E. Herlong, Florence, S. C.

There being no further business the Society adjourned.

E. E. Herlong, M. D., Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY, JANUARY 10, 1928, AT 8:30 P. M.

Meeting was called to order by the President, Dr. Harry P. Jackson.

Present: Doctors: Allen, A. E. Baker, B. R. Baker, Ball, Banov, Beckman, Burn, Cain, Cathcart, Chamberlain, Jackson, Jenkins, F. B. Johnson, Kollock, Lynch, McCrady, Maguire, Mitchell,

Mood, O'Driscoll, Plowden, W. H. Price, F. R. Price, Ravenel, Richards, Rhame, Rutledge, Sanders, W. A. Smith, Taft, (30).

Minutes of the meeting of December 27th were read and confirmed.

The Secretary presented the letter of Dr. Wm. H. Prioleau, which had been properly endorsed, and containing initiation fee. This was referred to the Board of Censors.

Under "Reports of Committees," Dr. G. McF Mood, Chairman of the Board of Commissioners, stated that a representative of the King's Daughters Association had written to the Board requesting information as to the agreement between the Board and her Association as to the character of the service called for for the patients in the King's Daughters' room in the Riverside Infirmary. He stated that since the contract had been made, many additional services had been added at the Riverside. That it seemed to be their impression that the Riverside should furnish board for special nurses, the anesthetist, laboratory service, etc., under the contract. He further stated that he felt that as this contract had been made between the Medical Society and the King's Daughters, the matter should be decided by the Society and not by the Board. This was discussed by Dr. Cathcart.

It was moved seconded and carried that this matter be referred to the Board of Commissioners, with power to act.

Dr. G. McF. Mood, Chairman of the Board of Commissioners, also brought up the matter of administering the alcohol situation at Roper Hospital, which was referred to the Board of Commissioners at the meeting of this Society on December 13th 1928. Dr. Mood's report was embodied in the following letter:

Charleston, S. C., January 9, 1928.

Dr. W. A. Smith, Secretary,

Medical Society of South Carolina,

Charleston, S. C.

Dear Dr. Smith:

Replying to your letter of the 19th ult. with which you referred to the Board of Commissioners of Roper Hospital a letter from Mr. Charles S. Whiting, Assistant Prohibition Administration, also a letter of Mr. F. O. Bates, Superintendent of Roper Hospital, beg to advise that at a meeting of the Board of Commissioners held December 20th ult. this matter was carefully considered, and the Board respectfully suggests the following procedure as the one in their opinion which will not only result in the handling of alcohol advantageously to the hospital, but also a method which it believes will be approved by Mr. Charles S. Whiting, Assistant Prohibition Administrator.

FIRST: The Board suggests that you, as Secretary, advise Mr. Whiting in writing, over the Seal of the Society, of the fact that Dr. H. P. Jackson is at this time President of the Society,

giving the date of his election to this office. It might be well to incorporate in this communication to him a copy of the resolution now standing in the minutes of the Medical Society of South Carolina, authorizing its President to sign application for permit to withdraw alcohol free of tax for scientific institutions and hospitals.

SECOND: In order not to hamper the normal and necessary use of alcohol in the institution the Board suggests that the Society pass a resolution granting the Superintendent or Pharmacist of this institution the power of attorney in fact in the signing of certificates of the use of alcohol in the Roper Hospital.

THIRD: It would finally suggest that in the Secretary's communication to Mr. Whiting, that he be advised that Mr. F. O. Bates is now Superintendent of the hospital and is authorized to sign certifications of the use of alcohol, and that Mr. G. H. Johnson, PH.G., is the pharmacist for Roper Hospital and is likewise authorized to sign certifications of the use of alcohol. That should a change occur in either of these positions during the year that he will be advised of such change or changes.

Respectfully submitted, G. McF. Mood, Chairman, For Board of Commissioners.

It was moved that this Society appoint Mr. F. O. Bates and Mr. G. A. Johnson as attorney in fact of this Society for the certification of alcohol. Seconded and carried.

It was also moved that the recommendations of the Board of Commissioners in the matter of handling the alcohol situation be carried out. Seconded—carried.

The Secretary read a letter from Miss Euranie Aimar applying for a position as secretary or office assistant to any members of this Society, and also a letter from Mrs. Correll in regard to the organizing of a physicians and nurses exchange. It was moved, seconded and carried that these letters be received as information.

The President read the following letter from the Secretary of the State Medical Association:

Seneca, S. C., January 9, 1928.

Dr. H. P. Jackson President Medical Society of South Carolina, Charleston, S. C.

Dear Doctor Jackson:

I congratulate you that you have been elevated to the Presidency of one of the oldest and best managed medical societies in the United States. Your proceedings as published in the Journal of the South Carolina Medical Association inspires the profession of South Carolina to greater ideals wherever they meet together in an organized capacity. This letter is to specially commend the splendid reports sent in to the Journal by your

very efficient Secretary, Dr. W. Atmar Smith. I want the Society to know through you that we appreciate very keenly this unselfish service on the part of your Secretary not only to the Journal, but to the State and the country at large. I plan to attend your meeting on March 13th, and enjoy again the cordial Fellowship I always find awaiting me there.

With very best wishes,

Yours truly,

(Signed) E. A. Hines, Secretary-Editor South Carolina Medical Association.

It was moved, seconded and carried that this be received as information and spread on the minutes.

Dr. R. S. Cathcart, Chairman of the Board of Finance, arose to make his report for this Board. As the hour for the Scientific Session was approaching it was moved and seconded that the Chairman be given permission to read these reports even if they overlapped the hour set for the Scientific meeting. Dr. Burn objected, and moved to table the motion, pointing out that it was a dangerous procedure. The motion to continue was then withdrawn, and the Scientific Session was called at 9 P. M.

Dr. Kenneth M. Lynch reported a case which had come into the hospital diagnosed as "laryngeal diphtheria," but in spite of the administration of anti-toxin, died, and came to autopsy. The autopsy revealed that no diphtheria existed, and that death was due to the enlargement of the thymus gland, accompanied by some acute respiratory affection. This was discussed by Drs. Rutledge, Kollock, Price, Taft, Banov, Rhame; Dr. Lynch closing.

Dr. James J. Ravenel reported a case showing a large renal stone, who was practically symptom free. Discussed by Dr. W. A. Smith, Dr. Ravenel closing.

Dr. D. L. Maguire reported a case of tumor of the thigh, which after operation turned out to be a large aneurism. He used spinal anesthesia.

At the conclusion of this report, the business meeting of the Society then proceeded.

Dr. R. S. Cathcart, Charman of the Board of Finance, reported as follows:

January 6, 1928.

To the President and Members, of the Medical Society of South Carolina. Gentlemen:

Your Board of Finance beg leave to submit this, their annual report.

We are charged with the audits of the books of all officers and committees having charge of receipts and expenditures of all monies for the Society.

According to our custom, we have had a certi-

fied Audit of the books of the officers and committees and submit, with this as our annual report, the certified reports of the auditor, as follows:

An audit of the books of the Board of Finance. An audit of the books of the Committee on Ross Estate.

An audit of the books of the Treasurer of the Medical Society.

A report regarding the Minute Book of the Secretary of the Board of Finance.

Respectfully submitted,

(Signed) G. McF. Mood, M. D., Treas. Edward F. Parker.

R. S. Cathcart, M. D., Chrmn. Edward Rutledge, Ex-Officio.

It was moved, seconded and carried that this Society extend to the Board of Finance its cordial thanks for its excellent work in the past year.

Dr. Cathcart, Chairman of the Committee on Expert Testimony, asked that further time be given the Committee to study the situation. It was moved that when the report is ready to be made that it be made a special order of business. Seconded—carried.

Dr. D. L. Maguire, Chairman of the Committee, submitted Resolutions on the death of Dr. Aimar. (Filed in Dr. Aimar's folder in "A" file). It was moved and seconded that these Resolutions be adopted by a rising vote. Carried.

Dr. Charles W. Kollock related some interesting anecdotes in the life of Dr. Aimar.

Dr. R. S. Cathcart, Chairman of the Committee, submitted Resolutions on the death of Dr. A. R. Taft. It was moved seconded and carried that these Resolutions be adopted by a rising vote.

The President appointed the following Committees for the ensuing year:

Committe on Public Health and Legislation: Dr. W. M. Rhett, Chairman; Dr. F. B. Johnson, Dr. J. T. Taylor.

Program Committee: Dr. J. H. Cannon, Dr. K. M. Lynch, Dr. D. L. Maguire, Dr. W. Atmar Smith.

Library Committee: Dr. W. C. O'Driscoll, Chairman; Dr. R. S. Cathcart, Dr. J. J. Ravenel, Dr. W. A. Smith, ex-officio.

Dr. R. S. Cathcart, Chairman of the Board of Finance, called the attention of the members of the Society to the fact that the former President of he Society had had considerable difficulty in making appointments with the co-trustee of the Alston bequest and informed the Society that Mr. Pringle Smith had given power of attorney to Hagood, Rivers and Young so that the Bonds might be clipped at the proper time.

The meeting then adjourned.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, JANUARY 24TH, 1928, AT 8:30 P. M.

Meeting was called to order by the President, Dr. Harry P. Jackson.

Present: Doctors: Allen, Banov, Beach, Beckman, Boette, Bowen, Buist, Byrnes, Cain, Cannon, deSaussure, Chamberlain, Deas, Finger, Gamble, Jackson, F. B. Johnson, Lynch, G. F. McInnes, McCrady, Martin, Mitchell, O'Driscoll, Prentiss, Price, Ravenel, Richards, Rhame, Rutledge, Sanders, Scott, Sedgwick Simons, J. E. Smith, W. A. Smith, Speissegger, Taft, Townsend, Waring, Wagener, I. R. Wilson, L. A. Wilson. (41).

Guests: Medical Students, nurses, and Dr. Asa B. Davis, of the Lying-in Hospital, New York City.

Minutes of the meeting of January 10th were read and confirmed.

The Scientific Meeting was called at 9 P. M. Dr. L. A. Wilson discussed the problem of the early rupture of the membranes in the induction of labor and exhibited an instrument which he had devised for this purpose.

Dr. R. L. McCrady reportd an interesting gynecological case. This was discussed by Drs. de Saussure, L. A. Wilson, Lynch, Cain & McCrady.

The President then called upon Dr. Charles A. Speissegger, a former pupil of Dr. Asa B. Davis, to introduce the speaker of the evening. Dr. Speissegger in a very appropriate manner introducd Dr. Davis, of the Lying-in Hospital, New York City. Dr. Davis gave an address on "Obstetrical Analgesia." On Dr. Davis' invitation the paper was discussed by Drs. I. R. Wilson and L. A. Wilson, Dr. Davis closing.

The meeting then adjourned, about 11 P. M. W. Atmar Smith, Secretary.

NEWBERRY MEDICAL SOCIETY

WHEREAS, it has come to the attention of this body, that the Board of Trustees of the Medical College of the State of South Carolina has asked the General Assembly for an appropriation for \$250,000.00 for buildings in 1928, and;

WHEREAS, the crowded conditions at that institution are well known, it being necessary to refuse admission to a large number of students each year, twenty-five from South Carolina having been excluded for the session of 1927-28 on that account, and;

WHEREAS, small towns and rural communities are dependent upon the State Medical School for the very necessary 'Family Doctor' knowing that graduates from larger and more expensive schools do not locate in rural districts but seek more remunerative fields, therefore be it,

RESOLVED, by the Newberry County Medical Society in regular session assembled, that we the members do heartily endorse the request of the Board of Trustees of the Medical College of the State of South Carolina for appropriations for buildings in the amount of \$250.000.00 and be it further;

RESOLVED, that the members of this society heartily endorse the resolution of the Board of Trustees of the Medical College of the State of South Carolina dated January 4, 1928, urging the General Assembly for said building or buildings as a Memorial to that Distinguished South Carolinian and Physician, J. Marion Sims.

The Newberry County Medical Society hereby requests the Honorable Senator and Members of the House of Representatives of Newberry County to use their good offices in furthering this worthy and notable project.

Adopted by Newberry County Medical Society in regular session, Friday, January 6, 1928.

H. Grady Callison, M. D., Secretary, W. D. Senn, M. D., President.

BERKELEY COUNTY MEDICAL SOCIETY ORGANIZED

Drs. W. K. Fishburne, W. A. Wall and L. H. Jennings met at Dr. Wall's office, January 18, 1928 and organized the Berkeley County Medical Society.

Dr. W. K. Fishburne, Pinopolis, S. C., was elected President, Dr. W. A. Wall, Bonneau, S. C., Vice President and Dr. L. H. Jennings, Secretary-Treasurer.

Dr. W. K. Fishburne was elected delegate to the State Medical Association which meets in Columbia in April and Dr. L. H. Jennings elected alternate.

Dr. R. E. Mason, St. Stephens, S. C., was elected trustee.

The dues were fixed at \$6.00 per annum, \$5.00 goes to the State Association and \$1.00 to the County Society.

L. H. Jennings, M. D., Secretary-Treasurer.

BERKELEY COUNTY MEDICAL SOCIETY MEETS

Drs. W. K. Fishburne, W. A. Wall, L. H. Jennings and G. S. T. Peeples met at the County Health Department. Drs. R. E. Mason and J. N. Walsh sent in excuses for their absence and asked that they be enrolled.

Dr. G. S. T. Peeples was elected Secretary-Treasurer to succeed Dr. L. H. Jennings who is being transferred to another County to continue health work.

Dues were paid in as follows:

Dr. R. E. Mason, St. Stephens, S. C., \$5.00 (State Asso.) \$1 (Co. Asso.); Dr. W. K. Fishburne, Pinopolis, S. C., \$5.00 (State Asso.) \$1 (Co. Asso.); Dr. W. A. Wall, Bonneau, S. C., \$5.00 (State Asso.), \$1.00 (Co. Asso.); Dr. G. S. T. Peeples, Bonneau, S. C., \$5.00 (State Asso.) \$1.00 (Co. Asso.).

Dr. J. N. Walsh is having membership transferred from Charleston County. Dr. L. H. Jenning's membership will be transferred from Lee County at the February meeting.

G. S. T. Peeples, M. D., Secretary-Treasurer.

THE UROLOGICAL ASSOCIATION OF SOUTH CAROLINA

Place of Meeting: Franklin Hotel, Spartanburg, S. C.

Time: February 7, 1928, 7 P. M.

PROGRAMME

Meeting called to order promptly at 7 P. M.

SUPPER

"Sub-Mucous Fibrosis"—Dr. Wm. R. Barron.
Discussion opened by Dr. M. H. Wyman, Columbia, S. C.

"The Differential Diagnosis of Urethral Obstructions"—By our invited guest, Dr. Edgar G. Ballenger, Atlanta, Ga.

Discussion opened by Dr. J. J. Ravenel, Charleston, S. C.

Report of Clinical Cases.

Hugh E. Wyman, M. D., Sec.-Treas.

LATEST NEWS ITEMS ABOUT COLUMBIA MEETING, OUR GUESTS

Dr. John Lovett Morse, Professor of Pediatrics Emeritus, Harvard Medical School, Consulting Physician of the Children's, Infants' and Floating Hospitals, Boston, has accepted an invitation to deliver an address on Pediatrics at the Columbia meeting, April 17, 18, 19. Dr. Morse is one of the outstanding pediatrists of the world and his coming to South Carolina will be an event of unusual significance.

Dr. Orin Moore of Charlotte, one of the distinguished obstetricians of North Carolina and the South, will present a paper in the Symposium on Obstetrics which will be one of the special features of the convention.

Efforts are being made to promote the largest and best exhibits, scientific, commercial and public health ever held by the State Association.

The Public Health Meeting at Anderson last year in connection with the South Carolina Public Health Association proved to be of such splendid proportions and interest that a similar program will be put on this year on Tuesday night, April 17. Eminent speakers will be invited to talk on various phases of preventive medicine.

The South Carolina Public Health Association now has a membership approximating one hundred and is rapidly increasing in importance as an adjunct to the various activities of the State Medical Association. Dr. E. E. Epting of Anderson is the President and communications may be directed to him in regard to the meeting.

The Woman's Auxiliary by virtue of the unusual interest over the Sim's Memorial will have by far the largest attendance since the organization was founded.

Many special societies take advantage of the State Meeting to hold more or less interesting programs.

As usual the Alumni banquet will come in for its share of good fellowship and get together spirit in the interest of the State Medical College. The graduates of all medical colleges are invited to this banquet and come in large numbers every year.

The Jefferson Hotel has been selected as Headquarters both for the meeting itself, for the exhibits, and for some of the entertainments. This arrangement assures a closer cooperation on the part of all of the varied activities of the Association. Members should write early for reservations. There are of course many other good hotels in Columbia, well known for their comfort and reasonable rates. The entertainments this year will be provided on a scale in keeping with the traditional hospitality accorded the State Medical Association wherever it meets. The General Committee urges the members to bring the ladies along so that there will be no doubt about everybody having a good time.

One of the striking developments of the State Association in recent years is that of holding clinics when the Association meets in a suitable place. One of these will be held at the State Hospital, an institution which under the guidance of Dr. Fred Williams is known throughout the country for its scientific treatment of the large number of patients admitted there. It is probable that many other clinics will be provided for.

The House of Delegates will convene on the night of April 17. There are many problems for the welfare of the State Association and the public likely to come before this body. By direction of the House last year the Council has under consideration a preliminary report on the model constitution for States recommended by the American Medical Association.

By strict orders of the House of Delegates the Scientific Committee must not permit more than twenty-five papers to appear on the program. The Scientific Committee will meet at Charleston, March 13, for the purpose of selecting the papers to be read and the proper grouping of subjects. After this date no further titles will be considered by the Committee.

A number of papers this year will be illustrated by slides and for the first time other papers will be illustrated by moving pictures. This will be an interesting innovation to our Association.

The registration at Anderson exceeded five hundred people. When it is considered that the State Association has less than one thousand members such an attendance is extraordinary. Columbia, however, expects six hundred.

A new County will be represented in the House of Delegates this year for the first time in the long history of the State Medical Association, Berkeley County. Elsewhere in this issue of the Journal will be found an interesting report on the organization of this baby County and incidentally the last County in the State to come fully under the influence of organized medicine.

One of the new ventures at the Anderson meeting was the golf tournament which excited keen interest throughout the State. At Columbia this splendid idea will be enlarged upon. Some of the details are being given herewith.

GOLF: Playing privileges on the courses of the FOREST LAKE and RIDGEWOOD CLUBS will be accorded those attending the South Carolina Medical Association free of green fees. It is desired to feature golf activities during the meeting. A flag (handicap) tournament will be played on Tuesday, April 17th, at Ridgewood Club. In this tournament players will qualify for the final low medalist event which will be played at Forest Lake Club on the following morning. A prize will be offered in the flag tournament for the low score. The major trophy or prize will be offered in the final tournament for the low medal score. Other prizes will be offered for the second low medal score in the final and for the greatest number of pars made in the combined tournaments. All who enter the flag (handicap) tournament must be sure to present handicap cards from their local professional.

The GOLF COMMITTEE requests that all who enter for the tournaments finish their matches by 2 P. M. Wednesday, the tournament closing at that time in order that the Committee may have time to make up its reports for the presentation of the trophies and prizes at the general entertainment Wednesday evening.

Physicians or ladies when they go to the different courses to play are requested to wear their badges, otherwise there may be some difficulty in getting on the courses unless accompanied by a member of the Club.

Dr. Robert W. Gibbes is Chairman of the Golf Committee, and associated with him are Dr. S. E. Wheeler, Dr. R. B. Durham, Dr. Theo. DuBose, Jr., Dr. R. G. Doughty and Dr. P. V. Mikell. Members of the Committee will be glad to be of service in any way they can to visiting golfers.

BOOK REVIEWS

TOBACCO AND PHYSICAL EFFICIENCY—A Digest of Clinical Data (With Annotated Bibliography). By Pierre Schrumpf Pierron, M. D., Professor of Clinical Medicine, University of Cairo. Published Under the Auspices of the Committee to Study the Tobacco Problem. Alexander Lambert, President; W. G. Anderson, Elmer Berry, Rupert Blue, Walter B. Cannon, T. N. Carver, Antonin Clerc, C. B. Davenport, Knight Dunlap, Joseph Erlanger, Chas. P. Fagnani, Frank A. Fetter, Bruce Fink, George J. Fisher, Irving Fisher, Eugene L. Fisk, Henry Ford, E. Gley, Abel Gy, Winfield S. Hall, Donald R. Hooker, Reid Hunt, J. W. Jenks, John H. Kellogg, Howard A. Kelly, Henry C. King, S. A. Knopf, S. W. Lambert, Thomas Lewis, E. S. Lines, W. P. Lombard, Everett W. Lord, E. G. Martin, E. V. McCollum, J. H. McFarland, R. Tait McKenzie, T. C. Moffett, John R. Murlin, M. V. O'Shea, Geo. F. Peabody, Joseph E. Raycroft, Leol F. Rettger, Oscar H. Rogers, P. Schrumph Pierron, Frederick Tilney, Henri Vaquez, Harvey W. Wiley, C. E. A. Winslow, John W. Withers. Paul B. Hoever, Inc., Publishers, 76 Fifth Avenue, New York.

CANCER CONTROL—Report of an International Symposium Held Under the Auspices of the American Society for the Control of Cancer. Lake Mohonk, New York, U. S. A., September 20-24, 1926. The Surgical Publishing Company of Chicago.

AMERICAN MEDICINE and the PEOPLE'S HEALTH—Being a survey of the organization of Medicine in the United States with special

reference to the adjustment of Medical Service to social and economic change. With an Introduction by The Committee of Five for promotion of study of the Economic Factors affecting the organization of Medicine. By Harry H. Moore, Public Health Economist, United States Public Health Service, Author of "Public Health in the United States," etc. D. Appleton and Company, New York, London.

LECTURES ON THE BIOLOGIC ASPECTS OF COLLOID AND PHYSIOLOGIC CHEMISTRY—Lectures on the Biologic Aspects of Colloid and Physiologic Chemistry. A series of lectures given at the Mayo Foundation and the Universities of Wisconsin, Minnesota, Iowa, Washington (St. Louis), and the Des Moines Academy of Medicine, Iowa. 1925-26. 12mo of 244 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1927. Cloth, \$2.50 net.

NUTRITION and DIET in HEALTH and DIS-EASE—Nutrition and Diet in Health and Disease. By Janes S. McLester, M. D., Professor of Medicine, Graduate School of Medicine, University of Alabama, Birmingham, Ala. Octavo of 783 pages. Philadelphia and London: W. B. Saunders Company, 1927. Cloth, \$8.00 net.

MEDICAL CLINICS OF NORTH AMERICA—
(Tulane University, Number —, November, 1927). The Medical Clinics of North America.
(Issued serially, one number every other month.) Volume XI, Number III, (Tulane Uni-



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Heart-artery-kidney, liabetic, digestive, rheumatic, nervous, toxic, anemic, underweight and overweight cases versity, Number, November, 1927.) Octavo of 210 pages with 46 illustrations. Per Clinic year, July, 1927 to May, 1928. Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London: W. B. Saunders Company, 1927.

THE SURGICAL CLINICS OF NORTH AMERICA—(Pacific Coast Number). The Surgical Clinics of North America (Issued serially, one number every other month.) Volume 7, Number 5, (Pacific Coast Surgical Association Number—October, 1927.) 266 pages with 132 illustrations. Per Clinic year (February, 1927 to December, 1927.) Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London: W. B. Saunders Company.

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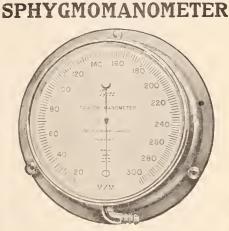
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South Carolina Medical Association

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EDITORIAL

OUR EX-PRESIDENTS

We believe no State Medical Association has a finer, more enthusiastic body of men constantly working for the interests and ideals of the State organization than the Ex-Presidents of the South Carolina Medical Association. There are about twenty of them living and every one of them active. By virtue of an amendment to our Constitution and By-Laws some years ago Ex-Presidents are accorded all the privileges of a delegate in the House of Delegates. This means that nearly one third of the House may be made up of Ex-Presidents. The innovation has worked very satisfactorily. The experience, wisdom, whole-hearted desire to serve and more important willingness to serve, constitutes an inspiring leadership calculated to advance organized and scientific medicine in South Carolina to much greater heights.

Many State Medical Associations have a place and a plan at the State Meeting to honor in some definite way their Ex-Presidents. The Journal would like to see this done in our State and will gladly receive suggestions as to how the idea may be carried out at Columbia.

THE COLUMBIA MEETING

Practically all arrangements have been completed for the special issue of the Journal, THE COLUMBIA NUMBER, in April, giving all the details for by far the largest meeting the State Association has ever had. The Provisional Program has already been mailed out and ample opportunity will be given for any additional news items for the special number of the Journal or for the Final Program.

The Scientific Committee met in Charleston, on schedule time, March 13th, and selected those who were to read papers at the annual

session. The number has been limited strictly to twenty-five in accordance with the mandates of the House of Delegates. This number of papers will be ample for two full days. The entertainments and clinics provided in the plans call for merited recognition. The social features have been admirably adjusted so that they will not interfere but supplement splendidly the Scientific Program.

The Jefferson Hotel has been designated as Headquarters. Other hotels recommended by the Committee are as follows, The Jerome, The Marmac, The DeSota and The Imperial. Everybody will be made comfortable but reservations should be applied for early.

WOMAN'S AUXILIARY

The special number of the Journal will carry additional information in regard to the plans of the Woman's Auxiliary. It is expected that the members of the Association will bear in

mind the highly promising program for this rapidly growing adjunct to the State Medical Association and bring their wives and daughters to the meeting.

POST GRADUATE COURSE, MEDICAL COLLEGE, STATE OF SOUTH CAROLINA

We have received information that the annual Post Graduate Course for the members of the State Medical Association and the profession in this and near by states will be put on at the Medical College, Charleston, S. C., the latter part of May and early in June, unless there is a great demand to select another date. Last year the undertaking was very successful in September, about one hundred and fifty doctors being enrolled. We hope it will be much more widely attended this year. Further details will appear in the May issue of the Journal.

ORIGINAL ARTICLES

WHY NOT EXAMINE THE RECTUM?*

By F. M. Durham, M. D., Columbia, S. C.

I wish to consider this from three angles or view-points.

- (1) The Rectum as a Seat of Focal Infection.
- (2) The Symptomatic Relationship that Exists Between the Rectum and the Genito-Urinary Tract.
 - (3) The Rectum in General Diagnosis.
- (1) The Rectum as a Seat of Focal Infection:

The anal crypts and papillae are situated at the mucocutaneous junction. All muco-cutaneous areas are very susceptible to infection and inflammatory changes. The infection in the crypts is usually of a low-grade, slow, chronic process, and produces very little local symptoms-just as a dead tooth often does. The crypts becomes clogged with fecal matter and remain so for an indefinite time. The nerve supply of the rectum comes from near the lumbar region, so the infection in the crypts has only a few inches to travel up the nerve sheath to the lumbar region. This is one reason why lumbar pain or tender spots in the lower portion of the spine are so frequently associated with chronic rectal and anal infection. Many a patient with pain in the lower part of the back has become toothless and tonsil-less, and found out later that he had missed the foci of infection. Herschmann says that an infected anal crypt must always be borne in mind as a most fertile source of focal infection.

(2) The Symptomatic Relationship that Exists Between the Rectum and the Genito-Urinary Tract:

There is a close symptomatic relationship existing between these organs because as Cook says, "The perineum, urethra, prostate, bladder and vagina also receive a part of their sympathetic and spinal innervation from the same source as the rectum. So, any diseases of these structures may produce rectal symptoms, while on the other hand, diseases of the rectum or any

local irritation of that organ may produce marked symptoms referable to the genito-urinary tract." Let me cite you a concrete case: A lady suffering with frequent and painful urination had been examined several times and each time with negative results. One day, she complained of pain after stool and her physician then referred her for a proctoscopic examination. A very small hair-like fissure was found on the anterior commissure. Another lady complaining of a diarrhoea and bearingdown sensations which no treatment for diarrhoea nor dysentery had ever given her relief, a proctoscopic examination revealed nothing to cause the condition. During routine examination, blood and pus were found in great quantities in the urine. A cystoscopic examination showed a cancer on the posterior wall of the bladder.

A patient with frequent watery stools was referred for a proctoscopic examination. A small ulcer was found which seemed to secrete the watery-looking substance. While the proctoscope was insitu, an argyrol solution was injected into his bladder. The argyrol soon appeared in the bowel. The diagnosis of Recto-Vesical Fistula was made, and the case referred to the urologist to dilate urethral structures, etc.

Another nervous, almost bed-ridden, cachectic-looking woman, complaining of painful, scanty menstruation and pain after defecation. was examined first for pelvic carcinoma with negative results. She was then examined for rectal cancer, the finding for cancer was also negative. A very small, anterior anal fissure was found and put down as the cause of the neurasthenia and genito-urinary symptoms. Her family physician refused to accept the diagnosis, stating that such a small lesion could not possibly cause such profound remote symptomatology. The fissure was relieved and the neurasthenia, cachexia and genito-urinary symptoms were also relieved. The woman gained twenty pounds.

It is often very difficult to differentiate between an abscess of Cowper's gland, an abscess of the prostate or an ischiorectal abscess.

^{*}Read before the South Carolina Medical Association, Anderson, S. C., April 20, 1927.

Rectal symptoms resulting from retroversion of the uterus are too common and well-known for me to discuss.

(3) The Rectum in General Diagnosis:

All rectal hemorrhages or muco-purulent discharges no matter how slight, should never be taken for granted as diagnostic of hemorrhoids, even though hemorrhoids were known to be present, but should call for a complete examination.

Let me give you an example: A lady suffering from bleeding piles was given salves and pile ointments for nearly a year. A Proctoscopic examination showed the bleeding piles to be a case of rectal cancer.

A man, almost exsanguinated from rectal hemorrhages with a diagnosis of rectal cancer was proctoscoped. Several very large bleeding piles were found and injected with quinine and urea hydrochloride. The man escaped operation.

Another patient consulted my colleague, Dr. H. H. Griffin. This man was complaining of bleeding and protruding piles. A diagnosis of incipient Adeno-Carcinoma was made. The patient is now well and healthy,

A lady was suffering from a dysentery, and on her death-bed. A digital examination revealed the presence of an annular rectal carcinoma.

I have seen several persons who were suffering from uncontrollable diarrhoea. A digital examination revealed a large, fecal mass in the rectum. Benign anal strictures give the same symptoms.

I have seen patients almost exsanguinated from continuous small hemorrhages from piles. Yet, these patients were taking Blaud's pills for their anemia.

A patient was given anodyne suppositories for several days for the relief of excruciating rectal pain. A digital examination revealed the presence of a piece of wooden tooth-pick.

Herschmann says, "Sciatica has been so perfectly simulated by rectal ulcer that diagnosticians have been repeatedly led astray. This is often the predominating symptom in lateral ulcer of the rectum."

Atrophic proctitis usually means advanced constitutional syphilis or some low state of nutrition.

Multiple anal fissures are almost certain to le of s philitic origin.

Painless fistulas are an indication of tuberculosis.

Flabby sphincter ani are found in cases of protruding hemorrhoids lasting over a period of years, or in diseases of the spinal cord, such as tabes dorsalis or cord syphilis.

Hypertrophied and spasmodic anal sphincter always mean local infection.

Pruritis ani is not a disease per se, but the result of some ano-rectal or constitutional disease.

Hypertrophied anal papillae frequently give the sensation of an unfinished bowel movement. Nothing in the whole category of diseases that man is heir to can cause more annoyance and produce a greater degree of neurasthenia than a hypertrophied papilla when it is sufficiently elongated to become caught in the sphincter or stick in the anal wall of the opposite side.

Amebic Dysentery:

Twenty-five years ago, amebic dysentery was thought to be a tropical disease, and in this country it was looked upon as a medical curiosity. At the Mayo Clinic between the years 1920 to 1924 inclusive, the entameba was found in 533 cases and it must be taken into consideration that less than five per cent of all patients at the Mavo Clinic were subjected to stool test. The greatest number of cases of amebiasis at the Maro Clinic came from the Northwest. This is accounted for by the fact that the Mayo Clinic draws its greatest number of patients from the Northwest. A good per cent of the cases, in fact all the active cases will show ulcers in the rectum. I mention this to stress the importance of a proctoscopic and stool examination in every case of dysentery.

Dr. H. H. Griffin with whom I am associated in our rectal work at Columbia will average seeing several cases of amebic affection a month.

THE OPEN TREATMENT OF FRAC-TURES

By Carl B. Epps, M. D., F. A. C. S., Sumter, S. C.

In preparing this little paper, I have tried to digest twenty-four articles on the treatment of fractures, by twenty-three different authors. If the result of this exhausting, if not exhaustive, effort appears to you to be a case of acute frac-

ture indigestion, please be charitable and blame the material from which it was prepared.

As to conclusions reached after this investigation, I am like the old country woman after her first ride on the merry-go-round. As she stepped off, she told her anxious daughter that, while she felt like she had "been a long ways and passed a lot er things," she was "powerful glad to git back" to where she started.

I find myself with a hazy composite picture of the great variety of opinions expressed, and I realize, on the other hand, that I still have a few definite, clear-cut opinions of my own, gained largely from actual experience in treating fractures. From examination of statistics, and from observation, there is one thing about which I have no doubt, and that is, that, generally speaking, our profession has but little to be proud of in its treatment of fractures. The average results obtained have been nothing short of a reflection upon our intelligence and perseverence.

However, I believe that we are at last upon the road to better things. One outstanding aid that we now have in the treatment of fractures is the X-ray. It has stung our pride by showing up our gross mistakes; it has made our patients dissatisfied with inefficient treatment, and these things have practically driven us to better work. Certain it is that satisfactory treatment of fractures is now impossible without the X-ray. In judging results obtained twenty-five or more years ago, we must remember that fractures were then treated without its help, that is, they were treated in the dark. Another tremendous aid that we now have is the development of a satisfactory technique in the open, or operative, treatment of fractures. As is the case with all live subjects, this procedure is still a matter of considerable controversy. On one extreme, we have the men who operate upon the slightest provocation, sometime subjecting patients to unnecessary inconvenience and extra expense, while on the other extreme are those who are so bitterly opposed to operative treatment that they deny their patients the only method of successful management. We should be truly thankful that we do not have to follow either extreme, thereby wandering from the safe highway. We can follow the example of the Santee River darky who, in relating his experience of encountering a big,

black bear on one side of his narrow path and an angry alligator on the other side, said he "jest slipped betwix en between"! In the medical, as in the political world, the easiest traveling is usually down the middle of the road.

The open treatment of fractures was carried on to a very limited extent a good many centuries ago. These early efforts, however, were largely experimental, and met with very little success, due to a certain extent, at least, to a lack of knowledge of aseptic methods. names of Malgangne, Lister, McBurney, and Porter, are among those who deserve credit for early work in bone surgery. Lambotte, of Antwerp, has been spoken of as the real father of operative bone work, although his crude apparatus is now largely of but historic interest. When we think of the modern open treatment of fractures, two names come to mind at once. those of Sir Arbuthnot Lane and Fred H. Albee. Lane found that strong steel plates attached to bone fragments with metal screws gave firm fixation. With these he achieved such brilliant results as to give a powerful impetus to bone surgery. These plates and screws were further perfected by Sherman. In recent years, Albee has won much fame by using autogenous bone-grafts, either slipped down across the fractured area, from the same bone, or taken from another bone in the same person. These grafts are hel.d in place by kangaroo tendon usually. Albee claims that this method is so satisfactory that he has abandoned the Laneplate entirely. Many other surgeons, however, do not share this view with him. A perusal of current literature shows that Lane and Sherman plates are still being used quite extensivel; and successfully by many prominent surgeons.

It is conceded by most surgeons that before operative measures are undertaken, the non-operative methods should be tried, unless there is clear indication for immediate operation. The nature of the work, and the extra expense involved should be explained to the patient before the open method is employed.

One of the main arguments heard against the open treatment of fractures is that it is a serious matter. The truth is that fractures, while not always considered serious, should always be seriously considered. From the patient's standpoint they are serious because they

cause suffering, possibly permanent disability, or even death, to say nothing about loss of time and perhaps heavy expense. From the physician's standpoint they are serious because of the responsibility, the tedious and long attention required, and the possibility of law suits. Deformed or amputated limbs are the poorest kinds of advertisement for a physician, especially if the public believes that better results should have been obtained. So when one is dwelling upon the seriousness of operative treatment he must not overlook the greater seriousness often pending if operation is not resorted to.

And is operation, under modern technique, in capable hands, so serious? Abdominal, and other operations, just as serious, or more so, and with less promise of benefit, perhaps, are readily entered into. Surely it is more urgent to operate upon a fractured femur, so that a person may walk again, than it is to do a laparotomy for a more or less harmless cystic ovary, or an innocent and unsuspecting "chronic appendix."

We must all get away from the old, slip-shod method of binding one or two pieces of padded board to an arm or leg that has been fractured, and then not seeing the patient for perhaps two or six weeks, or may be never seeing him again until he faces us long afterward with a permanently crippled limb. The man who treats fractures that way these days is not just inviting trouble, he is subpoeanaing disaster!

The average general practitioner or surgeon is not greatly concerned with finely spun theories. He wants to know what is best for him to do when a fracture comes his way. So let us consider some of the definite conclusions that have been reached by those who are best qualified to testify.

Boorstein, of New York, in a consideration of the rules laid down in old text-books, shows us how greatly opinion has changed. The old rule was that fractures should not be reduced until after swelling subsides, but now we reduce at once unless there is some special reason for delay. Formerly reduction was to be made by direct pull; now it is in accordance with relaxation of muscular pull, limbs being put in position to take the pull off of certain muscles. Immobilization as far as possible of the

joints above and below the break was formerly sought, but now we mobilize to prevent slipping by the muscular spasm, irrespective of whether or not another joint is to be included. Instead of applying straight splints to round limbs, as was formerly done, we now use plaster casts, or splints properly shaped with regard to the outline of the limb, formerly, bones and joints were immobilized by bandages left in place until firm union had occured, but now immobilization is allowed only for a short time, usually, until one is certain that the fragments will not slip, then other treatment is employed. Soft parts, such as skin, nerves, blood-vessels, and muscles, were largely allowed to take care of themselves, while now there is proper care of these parts by early massage, exercise, and early removal of splints. It is said that formerly contour, or union in good position, was the main aim, and that now function is the chief desire. Nevertheless, contour must still be carefully considered. It is now sought to substitute early return to function for prolonged confinement to bed. Deformity, which was often considered inevitable, was to be corrected later, but now prevention of deformity is carefully sought. The X-ray was used only once or twice during the entire time, but now it is used much more frequently.

In this era of specialization the question of who should handle fractures is being discussed more and more. The general practitioner is here, as in most other fields, called upon to treat a large percentage of the cases. This being true, it behooves him to study the question carefully. Certainly the general surgeon must be prepared to handle simple and complicated fractures efficiently. This entails special study and rather expensive equipment. It has been said that the orthopaedic surgeons, in their zeal for treating joints, tendons, nerves, etc., have not given sufficient attention to perfecting their treatment of fractures.

It is of vital importance to determine just which fractures should be subjected to open treatment. Dr. Frederick J. Cotton, of Boston, an eminent authority who seems neither too conservative or radical, in a very recent article, classifies fractures according to suitable treatment as follows: Under the heading of fractures that are subjected to operation as routine treatment are the following: Fractures of the Patel-

la, with separation; olecranon fractures, with separation; astragalus lesions, fractures of the surgical neck of the humerus, with luxation; hip fracture with hip dislocation at the hip; dislocation of the carpal semilunar with or without scaphoid fracture, unless reducible; splintered fracture of the radial head; separation of upper epiphysis of humerus with displacement; and multiple metatarsal fractures with displacement.

Under debatable cases, or those that rather commonly come to operation, he classes: Fractures of the femur not reducible with tongs traction; fractures of the humeral shaft, low, but not elbow fractures of the humerus; fractures of both bones of the forearm; fractures of the lower leg, not reducible, or with recurring displacement; and fractures of the tarsal scaphoid.

Under fractures often operated upon, are: Fractures of the radial head, not comminuted; other elbow fractures; and fractures of the carpal scaphoid.

Though the methods of treatment are still the subject of considerable discussion, as before mentioned, still, there are certain broad conclusions upon which the majority seem agreed. As Cotton well says: "We must obtain results: if skill with apparatus handling will accomplish results, well and good; if not, the question of operation is always to be weighed, and, for all that we can foresee, a great deal of operating is to be done." The National Fracture Committee, now working with and for the American College of Surgeons, is trying to bring about a definite agreement on methods. This committee has the general reputation of being conservative, but, as the above quoted author states, "The Fracture Committee with all its conservatism is composed of men who are doing fracture operation all the time:"

As to who should attempt the open treatment of fractures and who should confine their activities to the closed methods, we have various opinions. In 1913 the American Surgical Association reached these conclusions, as summarized in the text-book by Roberts and Kelly: That practitioners not trained in surgery as a specialty should adopt routine non-operative methods midway between prolonged immobilization on the one hand and the mobilization

method of Bardenhouer on the other. That trained surgeons, restricted by moderate efficiency and facility, either person or hospital, probably should adopt a routine of less prolonged immobilization than heretofore, of traction with friction, early light massage and mobilization for the usual run of fractures, and that they should restrict operative treatment to fractures known to be especially rebellious, or found to be so after a few days study. They concluded that for the skilled surgical expert with adequate facilities it makes little difference in morbidity or mortality whether he adopts a blood-less or blood-letting method for obtaining a functional and an anatomical cure, provided that he personally dominates the situation as to reduction, fixation, and after treatment. The practice that some surgeons have of leaving too much for the interne to do is not fair to the patient. This carelessness is somewhat analagous to that of the general practitioner who does not follow up his fracture cases outside of the hospital.

The British Fracture Committee, some years ago, expressed the opinion that the operative method requires special skill, experience and equipment; that although functional cure may be good with an indifferent anatomical result, the most certain way to obtain a good functional result is to secure a good anatomical curve; that no method not definitely promising a good anatomical result should be the chosen method of treatment; that the direct mortality of blood-shedding treatment was small in competent hands as not to furnish a sufficient reason for its rejection, and that for best results it should be adopted as soon after accident as possible.

This latter conclusion as to time of operation seem to coincide with the best modern opinion. Having decided that operation is indicated, unless there is some special reason for delay, the sooner the operation is done the better. Often the pain and swelling is due to the abnormal position of the bone fragments, and immediate reduction, by closed or open methods will give prompt relief from these two distressing symptoms. Recently, I was called in to see a fracture of the femur of a few days duration. The thigh was so swollen that the skin appeared thin and glistening, having the appearance of an abscess. As soon as the

fragments were gotten in line the swelling began to subside.

We will now consider the best methods of securing and retaining apposition in fractures, with very brief mention of the non-operative methods first. The old Buck's extension is still used by many in the treatment of fractures of the femur although it is notoriously unsatisfactory. The application of adhesive straps in this method cause skin irritation, sometimes even to the point of ulceration. Other ways of securing traction in this method are about as disappointing. Of the many splints devised the Thomas splint, with the Balkan frame, is probably the most popular at the present time. The use of Steinmann's pins through the lower end of the femur, with extensive apparatus attached, is often effective, but this is really an operative method. Reduction with immediate application of plaster cast, is frequently employed. To attempt to enumerate the great number of splints and appliances that have been used with more or less success in the treatment of fractures of the arms, hands, legs, feet, clavicles, etc., would be impossible here. The American Surgical Association's Fracture Committee has reported that in non-operative treatment of fractures there is no method, or splint universally applicable, nor has any given splint or apparatus proved its superiority. The molded splints, shaped to fit the limbs snugly, and not impervious to the X-ray, are justly popular.

To secure approximation general anesthesia is usually necessary.

The use of a fracture table, such as the Hawley, for instance, is an invaluable aid in securing approximation and applying retention apparatus in both the closed and open methods.

In the operative methods we have quite a number of fixation devices from which to choose. In certain cases where the ends of the fragments fit into each other nicely no fixation is needed, the plaster cast being sufficient. Many surgeons, Albee being notable among them, now consider the Lane and Sherman plates as practically obsolete. On the other hand, there are many prominent men still using them with good results. Personally, my chief objection to them is that they usually require removal, thus necessating a second operation, although but a minor one, generally. In the several

temurs and tibias in which I have employed them, they have, generally speaking, given very good results. The use of silver wire has special indications. I have found it eminently satisfactory in fractures of the jaw and clavicle. By its use in the jaw bones the very awkward mouth-plates, wiring of the teeth, etc., can largely be dispensed with. The use of nails, screws without plates, and metal staples and spikes, have a very limited place in fracture surgery. Metal bands, such as Parham's, have not proven very satisfactory. They are said to interfere with bone growth, especially in children, and subsequent fractures have been blamed upon them.

The modern trend is strongly toward material that is either absorbable or at least is not injurious to the tissues, requiring removal.

Albee's work has given great stimilus to the autogenous bone-graft, already mentioned. I have had the pleasure of observing his work at different times. (Not to mention the doubtful pleasure of paying a big price for his boneworking outfit!) There can be no doubt of the effeciency of his methods in his hands. Their greatest fields of usefulness seems to be in cases of non-union, malunion, and vertebral surgery. One objection is that it is a rather complicated procedure. Except when the sliding graft is used, it requires two separate operations, one for the removal of the graft and one for its insertion, thus having two wounds to increase the liability of infection. It, to a certain extent weakens the bone from which the graft is taken, at least temporarily. It also requires considerably more time than does a plating operation. The question of the ultimate fate of the bone-graft is still debated. Some hold that it actually grows, this being theosteogenetic theory, while others claim that it can, at best, only act as a sort of frame-work for new bone cells, or undergo absorption, this being according to the older, osteoconductive, theory. This, however, has but small bearing upon the mental comfort of the man whose limb has satisfactorily healed!

The homoplastic graft more nearly approaches the autoplastic graft in good results than does the graft taken from a different species, the so-called heteroplastic graft.

Boiled animal bone and fresh, live bone, was

formerly used a good deal but is not now popular.

Ivory and dried animal and human bone, made into plates and screws, appear to have a wide field of usefulness. I have not seen much in the literature concerning them. I have found these bone-plates very satisfactory so far, having used them in only one tibia and three femurs. I consider them a great improvement upon the Lane-plate, though more difficult to insert. I have not had to remove any of these plates, but the oldest one is of only 5 months standing. An X-ray of this case showed that, apparently, the bone-plate was being incorporated in the femur. The out-fit for this work is comparatively inexpensive.

I have found kangaroo tendon very efficient in small bones, such as the ulna and fibula. I secured firm union in the femur of a child by its use, but there was considerable bowing, probably due to too early weight bearing. It was used in this case because the bone was too small that I feared splitting of the bone by screws.

It is of the utmost importance to apply wellfitting plaster casts to operative cases. In the case of the femur, the cast should run from the base of the toes to at least as high as the ensiform cartilage, being sure to leave the heel uncovered to prevent the intolerable burning that follows if it is covered. In my earlier work. I had some trouble with bone-plates, one of them breaking and two of them pulling away from the bones. I believe that this was due at least to a large extent to inadequate plaster casts. I invariably leave a window in my casts, formed of paste-board, about which the plaster bandage is wound. This allows free inspection of the wound, and dressing when necessary. Many cases require a drain for a few days, especially where there has been much hemorrhage previous to operation. One of my colleagues dubbed this window as my "Door of Hope," and such it has proven to be.

Summary

Judging from my own experience, and influenced by what I have learned from others, I have reached the following conclusions:

1. That all fractures are to be seriously considered, and that every ounce of intelligence

and perservance is needed for their successful treatment.

- 2. That every fracture patient should be at once acquainted with the real nature of his injury, and that any possible disastrous outcome that you may fear ought to be mentioned.
- 3. That the older text-book teachings are now largely obsolete.
- 4. That closed treatment should be conscientiously tried on most fracture cases before operation is decided upon.
- 5. That we are rarely justified in deciding for or against any mode of treatment by what any one man says about it.
- 6. That non-absorbable material is to be used in bone work only when the absorbable cannot be satisfactorily employed.
- 7. That it is often absolutely impossible to satisfactorily reduce or retain fractures without operation.
- 8. That the surest way to obtain good function is by good anatomical position, and that we should not tax Mother Nature too much by leaving upon her a big burden of callous formation in order to secure union. She may rebel.
- 9. That X-rays, taken from at least two angles, are indispensable in the treatment of fractures, and that the pictures taken after setting are usually more important than those taken before. And that X-rays are of great importance in preventing and defending lawsuits.
- 10. That if we are not personally interested in fractures, and if we do not possess considerable perserverance and some mechanical ingenuity, we had better "pass the Buck" by referring fractures to those who are prepared to treat them successfully.
- in what they demand for satisfactory approximation, and functional results, one being astonishingly well satisfied with conditions that another would consider grotesque.
- 12. That it is vitally important to preserve periosteum, especially where plates are used.
- 13. That, to the author, a fracture of the shaft of the femur, except in the very young or the very old, usually means operative treatment.
- 14. That we have been prone to be too easily satisfied with results in the treatment of

fractures, and that it takes real moral courage to confess our failure to our patients and to advise further, perhaps radical, treatment.

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REPORT OF CASE OF LIVER ABSCESS

By E. M. Hicks, M. D., Florence, S. C.

CASE: R. P. M., white, male, age 31, single, baker by trade, lived in the city at a boarding house.

Complaint: Fever, aching, chilly, weakness, and no apetite.

- F. H. negative as far as connection with the case was concerned, and this was confirmed by sister, who is a nurse, and the father.
- P. H. Had the usual childhood diseases. No other serious illness—as typhoid, pneumonia, malarial, rheumatism, venereal diseases Denied absolutely luetic infection. saw service in France during the world war but did not serve in Texas or tropics. About two years ago he had an attack of "soreness over the right kidney, and the physician wanted to operate, but I changed physicians and soon got well." At that time he had no jaundice, and at no other time has he had jaundice. Has never passed blood in sputum, emesis, stool or urine. Has never been treated for parasites, and no physician has ever told him that he was infected with parasites. He had "footitch" as a boy but not in the past twenty years, and examination in school showed stools negative for hookworm. He has never liked raw meats, and did not think much of raw vegetables, celery, lettuce, etc. He

worked in the cake baking part of the bakery.

P. l. December 22, 1927 I was called to his house for the first time since treating him in August 1927 for bad laceration of the hand by a machine. I found him sitting in a chair before the fire. "Yes I have been sick since Tuesday, the 20th, 3 days ago, but I have not been in bed and do not feel like I should be in bed now but I was afraid I might get sick on the job and lose time here at Xmas when we are so busy. I worked right up till today but the boss thought I had better stay home and see a doctor today, but I expect to go back to work tomorrow if you think I am not running a risk. No I have not had any pain and I only cough a little and spit up nothing. I was chilly Tuesday and a little today but that was because I went into the bath room to shave and had no heat there. I do not feel that I have had any cold though I have sneezed a few times and when I did I had a catch just under my right nipple, and pain with breathing. Yes I can feel it if I I have to breathe awfully deep to get the same breathe deeply enough. Bowels are open good, took calomel and salts Wednesday. Eating fine and only have a little fullness in my stomach with sour stomach and my heart palpitates a little sometime. But that is no worse than at other times. I don't think I have any fever right along since Tuesday, only at times and that is not much, but I have not taken it at any time. I have lost no weight."

Physical Examination: A young white man, well nourished, sitting in a chair before the fire smoking a cigarette talking to a friend. Laughs and talks freely and makes a joke out of his having a doctor. Mucous membranes pink and normal. Temperature 103. Pulse 110 BP. 120, 86 (Tycos). Ears, nose, eyes, teeth, normal. Tongue slightly coated. No eruption on the body. No jaundice noted.

Chest: well formed moved freely and equally, but with forced breathing there was a slight retraction of the lower right chest. Palpation and percussion was negative, only the normal findings over the chest front and back, also the heart appeared normal with inspection, palpation and percussion. Auscultation: left chest was normal except a slight accentuation of the expiration and an occasional mucous rale over the larger bronchi. Right chest

showed the same picture as the left except just under the right nipple there was a friction rub elicited with forced breathing but was not heard with normal breathing. There was no change in the fremitus, voice sounds, whispered sounds, breath sounds and no moisture was made out over this area. Abdomen was negative. Percussion over the kidneys or Murphy sign, was negative. GU system negative. Reflexes normal. Urine: negative for pus, albumin, sugar and casts.

Visits were made on the 23rd and 24th with practically the same findings except there was a higher fever curve, $103\frac{1}{2}$ to $104\frac{1}{2}$; slight cough; more pain on breathing in the right side; wider area of Pleuritic rub. At this time a diagnosis of Pleurisy, fibrous, acute, right with a possible central pneumonia, was made. On the 25th I went back and he had begun having more pain on coughing, and moderately deep breathing, and the pain was below the right nipple and into the right lower back over the kidney region, some in the upper right abdomen. Palpation over the kidney and the gall bladder showed marked tenderness, and deep percussion or Murphy sign over the Kidney was very positive. Urine however was negative, 26th showed him a little more comfortable and holding on well. Tuesday, 27th, I was called back and he had had three chills up to 10 A. M. I found the fever 105, rigid upper abdomen, very tender over the right kidney, grunt with each breath, respirations 45, pulse 130, and yet no change in the voice, breath, whispered sounds, but a rub was well heard into the right axilla when we could get him to breathe deeply. I suspected a gall bladder or pyelitis or both, and possibly a Sub-Phrenic abscess. I called in a consultant and he advised that the patient be removed to the hospital. This was done. Examination there: Urine-Albumin 1 plus, no sugar, no pus. Blood: WBC 19,500. Polymorphs 67 per cent, Basophiles o per cent; Hemoglobin 80 per cent. X-ray: Right Lobar Pneumonia, early or late, was the diagnosis. Right kidney pelvis was catheterised and urine was negative from right kidney. The patient became sicker and sank fairly rapidly until the 20th and he began a jaundice which became very intense. He was delirious; vomited green stomach contents. Gavage was done. High fever. Grunt with each breath and cough. Upper abdomen rigid, tender; also over the kidney there was tenderness on pressure and percussion. There was bulging of the lower right costal area in the axillary line. Liver was extending three fingers breadth below costal margin anteriorly. 1 asked that a needle be put into the bulging area in the axillary line but the diagnosis of the hospital confirmed by Internist, X-ray, surgeon, etc., was held to, and the procedure was discouraged and not done. The patient became worse, and on January 4th another X-ray was made with horizontal Fluoroscope and the liver or rather the dome of the right diaphragm was about three inches higher than the first one made a week before, percussion showed the liver margin as low as the umbilicus and a mass in the left abdomen was made out down to the crest of the llium, which was continuous with the liver dulness across the upper abdomen, supposedly spleen of course. Bowels were moving, fever high, delirious, spitting some green fluid, jaundice very intense. asked for a needle again into the region below the diaphragm holding to my diagnosis of the 27th, that there was something below the diaphragm. I was promised that it would be put in that night. Next morning I was told that they lost their nerve. The next day however, I said I was taking all responsibility for the case and I wanted the procedure. (I forgot to say that five days before this a needle was put into the right pleural cavity in the axillary line and 10 cc of straw colored fluid, with a few cells and a negative culture was obtained. On January 5th a needle was put into the Sub-Phrenic space just at the costo-Xyphoid angle, right ,and with negative results. Then just over the bulging area in the right axillary line just below loth rib the needle was put in, a 20 cc syringe was filled with a yellowish viscid pus fluid, and another syringe full was withdrawn until 1100 cc were withdrawn. Some syringes appeared almost creamy pus, others almost pure bile, etc. Examination and culture of this showed nothing. Stools were examined for all kinds of parasites, but were negative. Patient got worse and on the 7th 800 cc of the same type fluid was withdrawn. Patient grew worse and died on the oth.

Autopsy: (Only the lungs and abdominal organs were examined.) Left chest showed

no adhesionsto the pleura and normal fluid in the sac. A little excess of clear fluid was in the pericardium. Lungs, left was negative for Pneumonia, etc., so was heart negative. Right chest: showed many adhesions over the lower anterior surface and over the diaphragmatic surface, and a very small amount of normally clear fluid. Lung was negative for pneumonia. Diaphragm was very high on the right. Abdomen: opened and a liver reaching the crest of the right ilium, and just above the umbilicus, and down to the left iliac crest was Spleen normal in size. All other abdominal organs negative. The hand was passed up over the liver under the diaphragm and a volume of pus flowed out, bile stained just as the above described. The liver was removed and was the largest liver I have ever seen. The left lobe was hypertrophied and extended to the crest of the left ilium, and showed no nodules, cavities, masses, nor any other change except hypertrophy. The right lobe showed a cavity which would hold 1500 cc and adjacent to the cavity was necrotic tissue from 3 to 10 cc in thickness all about the cavity except in the right auxiliary line and there were two areas where the necrosis had almost reached the surface of the liver. Practically the whole right lobe had been replaced by cavity and necrosed tissue.

A diagnosis was not made at that time and has not been made since. Cultures and section revealing nothing which would confirm diagnosis, or even suggest diagnosis. Gumma, Tuberculosis, Cyst, Parasite, Amoeba, primary or secondary abscess, all have been considered and we are yet to find a satisfactory diagnosis. We know that 85 to 90 per cent of liver abscesses are amebic in origin.

Personally I think there a great lesson from this case in that we can have all the signs of Pneumonia, including X-ray, etc., and yet not have it. I would not say all signs because I never found it with the stethoscope. I made my early diagnosis of Pneumonia because it looked like it and I could get no other findings anywhere else and as all of us have to do we have to make a diagnosis for the family, and also every one of us is going to have to make a diagnosis especially of pneumonia, because we know it's there and yet we cannot find all the signs with the stethoscope, but they will be

there in 24 to 36 hours. Also this brings out the difficulty of the gall bladder, the pelvis of the kidney, the Hepatic organ, the Sub-phrenic space, Diaphragmatic pleura, lung tissues and their respective involvements and the great difficulty in differentiating between them clinically, and even with the best equipped laboratory aids one can miss a diagnosis and be unable to differentiate and make a definite diagnosis until the patient is too far gone or practically dead, and possibly he may be dead before we know what the pathology is.

THE TECHNIC FOR THE ERYTHROCYTS SEDIMENTATION TEST AND ITS DIAGNOSTIC VALUE*

By W. H. Carrigan, M. D., Summerton, S. C.

In making the blood sedimentation test it is necessary to have the following material:

One sedimentation tube (Standard calibrated tube).

One Tuberculin syringe, 1 C. C., calibrated in 0.1 C. C.

One Hypodermic needle, three-fourth inch, 23 gage.

5 per cent sterilized sodium citrate solution fresh every two weeks.

One Tourniquet for veni-puncture.

The Technic is as follows:

- 1. Draw 0.2 C. C. of the 5 per cent sodium citrate solution into a tuberculin syringe.
- 2. Puncture a vein and draw into syringe sufficient blood to make 1 C. C. of the mixture, making a solution of 0.2 C. C. of citrate and 0.8 C. C. of blood.
- 3. Invert the syringe once so that the citrate and blood are thoroughly mixed and thus avoid clotting.
- 4. With the needle still attached to the syringe, inject this mixture slowly against the side of the sedimentation tube, thus avoiding air in the tube.
- 5. Invert the tube once so that the citrate and blood are thoroughly mixed.
- 7. Record the second reading when the column of blood cells settle from serum and reaches the 18 M. M. mark on the sedimentation tube, as for example 4:30 P. M. The sedimentation time is, therefore, sixty-one minutes. If

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the blood clots, the reading should not be used. Never remove the needle from the syringe until the blood has been placed in the sedimentation tube.

In the blood sedimentation test we have another aid—in the diagnosis and prognosis of infection—which when frequently repeated and correlated with the Clinic history, temperature curve and the white cell changes, is a valuable index as to when to operate, as well as a sign of prognostic value.

The value of any test will depend upon its simplicity, its applicability and the additional information which it affords over other diagnostic methods when correlated with them.

Rapid sedimentation means infection. A sedimentation time of more than 160 minutes excludes infection.

Some claim they have never operated on a patient who has had a rapid reading, in which they had not found an inflammatory process too active for conservative procedure.

When the sedimentation has been less than thirty minutes, localized collections of pus or purulent material has been a constant observation. It has been reported by one authority that in seven patients suffering from pelvic abscess, the sedimentation time varied between eight and twenty-one minutes and in every case in which the symptoms pointed towards an inflammatory exudate, and in which there was a rapid reading, with or without fluctuation, pus was demonstrated. When a sedimentation time is around 150 minutes the inflammatory process is considered healed. The post-operation records show that in a number of laparotomies done for pelvic infection the results show that when the sedimentation time is below ninety minutes, the morbidity is increased, complications are more numerous and convalescence is more prolonged.

And too the sedimentation test is of help to us when the time arrives for us to discharge our patients. Previously doctors have felt safe in discharging patients from the hospital when they had had a normal temperature and normal leucocyte count for one week. Many patients who at the time of their discharge had a sedimentation time of thirty or thirty-five minutes, on returning home and assuming their usual duties have been seized with severe pain and rise of temperature which necessitated their re-

turning to the hospital for further treatment. Hence, it seems quite logical that a patient with a sedimentation time less than forty-five minutes should be given a longer period of time in which to convalesce.

In conclusion—The sedimentation test has been found to be an aid in diagnosis.

- In determining the time for elective operation.
- 2. In prognosticating post-operation complications after the first week.
- 3. As a criterion for discharging patients. Finally, a low reading means infection and a high reading means that infection can be excluded for sedimentation never lies.

THE RELATION OF SURGERY TO PUBLIC HEALTH*

By Ben F. Wyman, M. D., Columbia, S. C., Director Bureau Rural Sanitation, State Board of Health

Dr. Haggard, in his Presidential Address to the American Medical Association, said: "It has been estimated that the number of cases of sickness in this country in a year is thirteen and a half billion, costing the nation a million dollars. If it were possible by nation wide effort, to reduce the amount of sickness by twenty-five per cent, the economic gain would be around a quarter of a billion dollars. How can we estimate the worth in anguish relieved and death postponed? Prevention runs as a thread of gold through the fabric of medicine. Every time we prevent illness we not only preserve that one individual as a productive force, but also one or two persons who would be required otherwise to care for him. The military idea that it is better to wound an enemy than to kill him is based on this idea." And herein lies the mission of preventive medicine.

Before discussing the position of surgery in preventive medicine I desire to very briefly outline

- 1. The general field of preventive medicine.
- 2. The diseased or pathological conditions that we can readily classify as preventable, and
- 3. The economic loss on the one hand and the gain by proper procedures and methods of prevention of these diseases, or pathological conditions, on the other.

^{*}Read before the South Carolina Medical Association, at Anderson, S. C., April 20, 1927.

The field of public health work may be said to have the following scope: (After Boyd's "Preventive Medicine")

- 1. Improved personal hygiene of all indivuals, including better standards of personal cleanliness, better dietaries, reasonable working hours, recreation and adequate clothing.
- 2. Improved standards of domestic and public sanitation, including relief from over-crowding, proper illumination, heating and ventilation, water supply, excreta disposal, etc.
- Improved sanitation of places of employment.
- 4. The immunization of susceptible persons and the control of infected persons.
- 5. The improvement of the breeding stock of the human race by the elimination of the physically and mentally unfit from reproduction.
- 6. The provision of facilities for aiding physicians in the diagnosis and care of their patients—by laboratories, hospitals and clinics."
- 7. The education of the people to the value of health and of health examinations by lectures, newspaper articles, pamphlets and demonstrations.
- 8. The early diagnosis and treatment of all diseases and pathological processes.

With this broad, but true conception of the scope of public health, we must turn our attention to the etiology of the various processes that enter therein. We have several groups of diseases whose etiology is sufficiently well known to warrant their classification as preventable. These groups are:

- 1. Diseases produced as the result of the invasion of the body by micro-organisms.
- 2. Diseases the result of faulty or deficient diet.
- 3. Diseases the result of unhygienic or unsanitary conditions.
- 4. Diseases arising as the result of the puerperal state.
- Diseases transmitted from parent to offspring, and
- 6. Diseases whose etiology is not definitely known, but whose pathology is sufficiently known, as to warrant us in classifying them as preventable, or the pathological processes can be reduced or removed by proper methods.

Directly as well as indirectly these diseases,

- or conditions, are the causes of immense economic losses. These affect both the individual and the social fabric. The following economic losses may be enumerated:
- 1. Temporary or permanent disablement of the patient as an immediate result of the disease, resulting to the individual in temporary or permanent loss of earning power, and to society in the loss of productive labor,
- 2. Sequelae or complications which permanently impair the individual's usefulness or hasten death from other causes,
- 3. Expenses of illness, which if due to preventable illness, must be regarded as economic loss,
- 4. The expense incident to the establishment and maintenance of public hospitals, asylums and charitable agencies to relieve want arising from disabling sickness, and
- 5. Making vast areas of the earth's surface uninhabitable for the civilized races.

The above mentioned economic losses can, with our present knowledge, be considered as preventable. The fact that we still have losses due to these causes is chiefly due to lack of ways and means for enforcing the necessary control measures. If the proper measures and means could be effectively carried out in our fight against disease we could reasonably expect:

- 1. An increase in the period of expectation of life,
- 2. Unhealthful regions of the earth would be made habitable, and more of earth's treasures would be available for mankind,
- 3. The economic productiveness of the individual as well as of the race would be increased. As a consequence individual and national wealth will increase and poverty and want diminish, and
- 4. Lastly, we may prophesy an improvement in the general physical condition of the race.

Preventive medicine means to certain physicians some aspects of sanitation, such as care of water and sewerage, the control of epidemics, the use of biological products as a prophylaxis against disease, or periodic health examinations of school children and adults. These measures are part and parcel of the program of preventive medicine but they are only part. Boyd in his recent work on Preventive Medicine de-

fines this specialty "as that branch of applied biology which seeks to reduce or eradicate disease by removing or altering the responsible factors." Under this definition preventive medicine rightly takes its place in the hearts of physicians. We can thus classify small-pox, appendicitis, diphtheria, pneumonia, tuberculosis, cancer, and such deficiency diseases as goitre, scurvy and pellagra; such septic diseases as puerperal sepsis and even orthopoedic conditions, as they are all part and parcel of this field of medicine.

Acute infectious diseases, usually classified as epidemic diseases, have an average death rate of about 12 per cent of the total number of deaths from all causes. Notwithstanding the small proportion of cases that we can group under epidemic diseases, there are many physicians who believe, that the public health officials only look after the quarantining of small-pox, or investigating the cases of typhoid fever, or perhaps vaccinating a few school children and thereby carrying on a suitable program in preventive medicine. There is more to the rights and duties of a properly functioning health organization than this.

The firm belief in the rights, duties and prerogatives of the physician is very clearly fixed in our minds. May I say that the high standing and place that belongs to our honorable profession must be maintained and carried on, and I want it known, and forever understood, that public health activities can and will be carried on, as far as your essayist is concerned, so as to render the highest type of service to the people, with due and certain regards to the rights and privileges of the physicians in this state.

How can surgery be considered a part of preventive medicine?

Unless the medical profession in South Carolina undertakes and educates the people to a higher standard of medicine we must expect the quacks and cults to flourish, to further encroach upon our rights and to continue to reap a rich harvest. It is not very difficult to understand how quackery and fraud can go on and on when we realize how close modern man is to the generations of the past who believed that all pain and suffering was caused by a perverse divinity or demon who delighted to inflict punishment upon man, thus through ig-

norance began fear, and with fear began superstition, which is based upon fear and ignorance. With the birth of superstition was the birth of magic. The Charlatan who could play upon the feelings of the ignorant had quite a mighty following where ever human beings suffered and hoped, and the haggard old witch and the grey bearded magician here reaped a golden harvest. In modern times the nostrums and patent medicines have replaced these meccas of healing and the descendants of the ancient sufferers and believers are now filling the coffers of the quacks. It thus behooves us to see that the people are educated to a higher standard of medicine, to a higher plane of thought. The all in all important point, certainly as to the surgeon, from a surgical standpoint, is the value of early diagnosis and treatment. Of what value is it to tell some old man that he has inoperable cancer of the prostate, or to diagnose an advanced cancer of the cervix, or perhaps of the rectum? Of what value is it to remove a cancerous breast after secondary metastasis has developed in the liver or lungs? Hence, we must carry on a regular campaign for (1) the periodic health examination of our people; (2) we must educate them to the vital significance and value of early symptoms, diagnosis and treatment; (3) we must forever overcome the prejudice and fear of hospitals and of surgical procedure—we must have the confidence of the people.

Focal infections are usually surgical in their nature and the removal of these foci usually prevents such serious conditions as cardio, - vascular - renal diseases. Diseased tonsils and apical abscesses in the teeth are of sufficient surgical importance as to warrant our attention. This we know, teach and practice, but do we teach the people the value of surgery in harelip and cleft palate, from the cosmetic standpoint if no other?

The simple boil is painful and should be incised, but do we teach the people that carbuncles have been long recognized as of considerable surgical importance, and may even cause death?

When we discuss iodine in the treatment and prevention of goitre are we not often depriving the patient of a potential operation? Usually by an early diagnosis of goitre, by such symptoms as fatigue, persistance of rapid pulse, loss

of weight and nervousness, we can prevent subsequent surgical care or use surgery, at the proper time and place to prevent death.

Why leave a cervix if there is reason to even think of subsequent malignancy? We do know that it is very often necessary to do a secondary operation and remove the cervix.

What do we mean by the term—indigestion? Very probably hundreds of cases of ulcer and even early malignancy are so diagnosed. We all believe that the early diagnosis of ulcer of the stomach, with proper medical and surgical treatment very frequently prevents pyloric stenosis or cancer of the stomach. Some authorities claim a very high rate of cancer devolving on the site of ulcers.

When a patient comes complaining of hemorrhoids it is of value to examine his abdomen and his rectum in order that embarrassment may be saved the operator by operating for cirrhosis of the liver or cancer of the rectum, or perhaps an abdominal tumor.

If we prevent typhoid fever are we not thereby preventing many cases of cholecystitis and cholelithiasis and subsequent operations for drainage or removal of the gall bladder? Also it is worthy of our attention to realize that by the prevention of typhoid fever we frequently would save our patient from an operation for a perforated ileum. In the April number of the Southern Medical Journal Dr. Garr discussed Typhoid Osteitis.

Quite recently in a notable gathering of surgeons who were interested in chest surgery the predominating discussion seemed to center around the surgical treatment of the chest caused by such diseases as tuberculosis, abscess from tonsillectomy, focal infection, etc. If bovine tuberculosis is eradicated by public health officials many cases of tuberculosis of the bones and joints, with the necessity for orthopoedic and surgical treatment would be avoided. Again, tuberculosis which is practically a social disease, with every ear mark of the public health officials stamped thereon, can and does cause tuberculosis of the kidney, abdomen, psoas abscess, etc. By eradication and control we thus again prevent the use of the surgeon. Thus we are warranted in considering that tuberculosis may have a very serious surgical side.

Hernia—a history of having had some physician prescribe a suitable truss—sudden pain—inability to reduce the mass—and an operation for strangulated hernia, or perhaps death. Can we not often prevent hernia? We must teach that hernia is usually surgical, that an operation for the radical cure, at the proper time and place, is usually attended with a very low mortality and very few recurrences.

Every case of gonorrhea is potentially a presurgical condition—orchitis, inguinal adenitis, salpingitis and such diseases are usually one of the terminal results; and again the surgeon.

Fractures—all fractures are surgical and their treatment is beset with many delusions and perplexities. We can go on and consider the prevention of deformities and useless invalidism by the improper handling of these cases as well as of accidental cases such as burns, cerebral injuries, but time forbids.

The literature is filled with case reports of inoperable cancers of the colon. Our records of death very frequently carry this notation. Do you suppose we often call these cases chronic appendicitis and dismiss them? This is especially true where we find the case with no definite symptoms, either subjective or objective, perhaps a vague feeling of distress. Pain is almost never one of the first signs of cancer. In fact in the early stage of cancer pain is extremely rare. Regardless of whether cancer is really caused by an unknown parasite or that the cause is due to the stimulation of cells by irritation, cancer has an important place in every phase of medicine.

Included under the classification of surgery we have obstetrics. Here by proper care of our patient, by pelvic measures, by frequent examinations, we can and do prevent lacerations, fistulae and even caesarean section. By proper surgical technique we prevent stillbirth and septicaemia. Some one has said a good obstetrician prevents orthopoedic clinics.

When it is necessary to amputate a limb do we fully consider the question of the subsequent use of an artificial limb by our patient and hence giving to this unfortunate the opportunity of dodging the poor-home, or the roll of the beggar?

If the women of our State were told that a mass in the breast, whether painful or not,

should be considered potential cancer we would prevent many disfiguring operations and even death.

Congenital defects, such as web-feet and finger supernumerary and club feet, are surgical but should be treated early to prevent deformities. By the prevention of acute poliomyelitis we prevent deformities and I am happy to know that here the orthopoedist has much to offer.

Diphtheria—The surgeon must consider the possibilities of doing a Tracheotomy.

In this very sketchy paper it has been only possible to enumerate rather than bring facts and arguments to your attention. I can perhaps be rightly charged with the very wide scope of my discussion. I am fully aware that from a technical viewpoint much that I have said is not usually considered in the field of surgery but most of it is classified as part and parcel of the public health program. I have only attempted to push back the overhanging clouds, and try to bring the value of early diagnosis and treatment, by the proper evaluation of the early symptoms on our part, and the education of our people, to a higher standard of medicine.

THE PATIENT AS AN INDIVIDUAL*

By O. B. Chamberlain, M. D., Charleston, S. C.

During the past few decades, there has been an unprecedented increase in the facilities with which the structure and function of the human body can be studied. Advances in bacteriology, bio-chemistry, bio-physics, immunology and serology have thrown tremendous light upon the processes of metabolism and neuro-muscular function. To this may be added the use of instruments of precision, the electro-cardiograph, the metabolometer, the ex-ray and others. The vital processes have been expressed much more accurately, and in fundamental terms which clarify problems to a marked degree. We are beginning to see a little light upon such questions as growth, senescence, hereditary influences and related problems. Biologic studies, made often in types far removed from the human, have contributed in no small measure to the clearing point of view. The age in which we live is definitely a scientific one. Unhampered by prejudice, and supported by forward looking philanthropy, science has plunged boldly into the realm of the material components of life. The men who are being prepared for the practice of medicine are receiving adequate drill and experience in the results of research. The four years of the medical curriculum are filled to overflowing in the acquisition of the new material. The talk of the senior student, or well posted practitioner teems with the names of new tests and new methods. For each organ or organ system there are a number of diagnostic procedures, each capable of informing as to the functional ability, or perhaps structural condition of the organ. After a patient has been put through the mill of modern diagnosis, we know a great deal about the condition of the parts which make him up. Now l do not wish to be misunderstood. I heartily approve of such intensive and complete surveys. In many cases they are quite adequate to point the way to operative procedures, or a change in regime, which will restore the patient to a satisfactory level of function. I wish to point out, however, that a larger and more inclusive viewpoint is necessary in order to know patients correctly, and to help them back to health. We particularly feel the need for such a viewpoint when we are confronted with the case labelled with the term "neurasthenic" or "hysteric." Peabody, in a late copy of the American Medical Journal has forcibly called attention to this problem.

In the general field of biology, there has been an increasing tendency to accentuate the concept of the individual. Child, of Chicago, has been particularly insistent in stating that the organism cannot be regarded simply as a collection of cells, or any other unit. The organism has a higher unity, that which springs from its being an individual. To draw an analogy, the activities and potentialities of an army are greater than the sum of the activities and potentialities of the men or groups composing it. Here and many other analogies might be cited, the whole is greater than the sum of its parts.

We can never understand the human individual, as a patient or otherwise, unless we are willing and prepared to go further than simply an understanding of the parts of the body. A

^{*} Read before the South Carolina Medical Association, Anderson, S. C., April 20, 1927.

physician may know minutely the working of every organ in a patient's body and yet fail utterly to know the individual as a whole. Really to learn a person so that one can have a true appreciation of the situation of the individual, those not easily analyzed attributes of the whole must be considered. But here, unfortunately, we come to the less concrete ground of personality, behavior reactions, and temperament. Here is something from which too many of us recoil. There is a regretable disposition to regard such studies as unpractical, beneath the dignity of a busy practitioner, and useless. There is likewise a disposition to regard them as lying entirely in a special field—that of abnormal psychology or psychiatry. An almost total lack of attention is paid to them in the medical curriculum. With the exception of certain lectures and clinics devoted to the outstanding psychoses, medical students remain in ignorance of such problems. Or to put the matter more accurately, they remain ignorant of any controlled and systematic approach to the study of the individual as a whole. The question at once arises. How accurate and definite is the science of personality, or, to use the more inclusive term, the science of the patient as the individual? The unpopularity of such a study arises largely from the tremendous field which must be covered in the survey. To know one's patient as an individual, one must be acquainted with every important factor in the heredity and environment. This cannot be obtained without exhaustive history taking and painstaking evaluation of influences which bear upon the reactions and behavior of the person. These inquiries are often distasteful to the patient, who much prefers to have his trouble settled, even if the settlement is temporary, by an operation, lavage of the kidney pelvis, or a tablet, than to undertake the search which will discover the underlying maladjustment. There are other outstanding reasons why the concept of the individual and his reactions has been neglected in medical practice and education. One is the vagueness of knowledge concerning the practical aspects of the problem. Until comparatively recently, psychology was engrossed with the dualistic theories—which is to say the separation of body and mind. Psychologists were concerned with fine spun theories as to con-

sciousness and its aspects. There seemed to be little of the practical in these ideas, and a medical student or physician could find nothing worth while to aid him in his struggle against human ills. In only one field, as has been mentioned, were the terms of psychology even alluded to. This field was itself sterile, except for an attempt to classify the outstanding types of departure from the norms of thinking, feeling, and acting. The vast bulk of medical endeavor was directed to the body, with a complete disregard and even contempt for the impractical considerations of the student of the mind.

There was, and of course, has always been, an unexpressed practice of rule-of-thumb psychology. No one can come in contact with human beings without becoming in some measure a student of human nature. While there are exceptions, it may be stated as a general rule, that the successful physician is the one who has arrived at a fair working knowledge of the problem of human behavior. He uses, either by the fortunate possession of a likeable personality, or a shrewd and intuitive insight, many of the fundamental principles of psychotherapeutics, without, however, realizing just how he brings about his results. How often do we, perhaps the less fortunate ones, wonder about the success of some classmate whose knowledge of the principles of medicine seems woefully small. It is the purpose of this paper, however, to point out that the later studies of human psychology have opened up definite and scientifically correct methods of investigation into these problems of the reaction of the individual to his environment. The psychology of today is concrete and practical. Its concern is with the understandable factors which lay the foundations of personality. Native endowment, intelligence, emotions, instincts, learning, coordination of the neuro-muscular mechanisms are the objects of its study. The stimulusresponse hypothesis of neural activity has simplified to an amazing extent the problems of the human organism.

The physician today can no longer afford to dismiss as abstractions the larger, perhaps more complex, problems of the adjustment of the individual to the environment. Even in the consideration of a patient with a demonstrable

lesion of the heart, there are many questions to be answered beyond those of digitalis and rest in bed. A full knowledge of the make up of the patient, his emotional nature, power of social adaptation, and his adjustment to the lower level upon which he must function, are all necessary if we are to understand fully and help him with his problem. These factors are of even more importance in a case where the carefully carried out means of organ diagnosis have failed to indicate any basis for the maladjustment. We are all of us too familiar with the person who comes to us full of hope that we will be able to get at the seat of his or her trouble. Both the patient and the physician enter upon the search for this hidden factor, the removal of which will transform the sufferer into a happy, satisfied, human being. How often unfortunately does the entire procedure end with sterile results. The physician often feels that, since a demonstrable physical factor must underlie the picture, he must incriminate some slightly abnormal structural or functional condition. The tonsil or tooth or other removable organ is done away with. Or a complicated dietary regime is embarked upon. If the physician possesses, in some measure, a magnetism of manner, there is a temporary buoying up of the patient from suggestion. Shortly, the maladjustment shows itself again. There ensues a few weeks of dwindling hopes on the part of the patient, and increasing irritability on the part of the physician. Then the break comes, and the unfortunate, characterizing the physician as incompetent or neglectful, leaves him and on the advice of a friend or relative takes up again, with a new guide, the search for the obscure lesion. It is perfectly true that these cases are often failures in the hands of men who are interested in the problems of personality. But a word in their defense may be said. The individuals generally reach them after years of wandering from practitioner to practitioner. A distrust of medical methods has arisen. Unwise, or unwary remarks have served to fix faulty habits of thought. One would expect little of the man who specializes in tuberculosis if his treatment was limited to the cases with well advanced cavitation, or the surgeon who operates on carcinoma only after metastasis has occurred.

Enough is known of the problems of behavior and personality to make that knowledge an integral part of the education of every medical student. These principles, and the broader viewpoint of human disease and maladjustment which comes from their possession will bring about a transformation in the method of approach employed by physicians. The structural or functional disorder, important as it is, will be only one aspect of the problem. In addition to the necessary repair of the organic lesion, there will be utilized the larger measures which will tend to place the patient in an understanding, satisfactorily adjusting response to the many factors in his environment.

DISCUSSION

Dr. Hugh Smith, Greenville Dr. Chamberlain has presented a subject of a great deal of interest in a very masterly way; I am sorry more men have not been here to hear this talk of his.

It is difficult to discuss this paper because we are dealing with a subject in which he is not incriminating any one particular phase of medicine, but making an effort to give all of us a few pointers in approaching a few of the obscure cases where we can not put our finger on a definite diagnosis.

A man doing careful physical examination, no matter how careful his routine may be done, ends up not infrequently without finding anything at all that will give him a lead as to what is wrong with his patient. I confess that happens often in my office and it happens in my office in the patients where the history has been taken by one of my assistants. I think that illustrates just what Dr. Chamberlain is bringing out. In these cases the history holds undoubtedly the key to whatever aid you are going to be able to afford that patient. Personality; the reaction of that patient socially, the reaction of that patient mentally, and the environment. Little things you have got to dig for, you probably won't get on your first visit with the patient. You have got to establish a spirit of absolute confidence on the part of that patient in you as a physician in order to get these factors. When you have obtained that state of confidence when you have delved into the patient's secret corners, you will find sometimes that a bit of friendly advice, a bit of wholesome counsel in regulating and correcting faulty habits or a false reaction to a perfectly normal occurrence, will enable that patient to again regain a state of comparative health. He is in no way speaking against the careful examination for focal infection: This must be done if you are going to build up the patient's physical resistance.

I would like to add just a word to what he has said and that is: The careful use of instruments of precision, of your laboratory and of physical examination will not always enable you to make an accurate diagnosis and will more frequently fail you in an effort to relieve your patient. You can not get away from a very, very carefully taken personal examination of that patient and working out through that, the other points.

Dr. O. B. Mayer, Columbia: I have enjoyed Dr. Chamberlain's paper very much. He has called attention to a fault many of us are guilty of. It is a thing we have overlooked in our present-day hurry and carelessness. The present-day man who goes into the minute precisions overlooks the patient as an individual and tells him things in such a manner as to actually mitigate against the patient. On the other hand, the old-time family physician had a valuable place in our homes. It seems to me if these two extremes could be combined, the ideal we are hoping for would be realized. The place to get the matter out is in the medical school. We may arrive at a proper diagnosis, but unless we understand the patient, or the patient understands us, he will go away with a hopelessness which will be very much against him and against us.

Dr. Saye, Columbia: I did not come prepared to discuss Dr. Chamberlain's paper but since I have heard it I am reminded it is exactly along the lines I have been thinking of, and that is the examination by the general practitioner of a patient as a whole. (Now I do not say this with any regard to my specialty because I do not expect anyone to refer patients to me by anything I say because I am employed by the Government), but we can not expect everyone to specialize in every line, so when the examining physician, regardless of who he is: Whether surgeon, eye-ear-nose and throat, gynecologist or what not-when he recognizes, through his general knowledge of human behavior, that there is something wrong with his patient, and he does not know whether it is a psycho ____ or not) when he recognizes his patient is out of tune with his surroundings, that patient should be referred to someone having knowledge of neuro psychiatry. I am employed by the Veterans Bureau and there is in the last issue of the Medical Journal put out by the Bureau an article on the encology of neurology. In place of having a classification of the psycho neurosis, including____ and mixed types, we can divide it in two groups only, and that is those in which the patient is in lagerheads with himself or with his external environment. He also takes into consideration whether there is a conflict within himself. The main thing is in determining what this patient is fleeing from! I will cite a case:

It is a case in which the patient has been to numerous physicians—practically every physician in Columbia. I witnessed Dr. Bunch taking out this patient's appendix. This appendix was suspicious. The appendix, it might be said, was definitely diseased. This patient has had tooth, two teeth, all teeth extracted in search for foci infection. Had everything imaginable done. He has imagined he has had stricture of the rectum. This patient is now in the legislature. He is now fostering a bill to provide for a Bureau for Chiropractics. He is a psycho ____. The proposition is this: That, regardless of who he iswhether he is a general practitioner, surgeon, or what not, if he recognizes his patient has a neurosis, then he should refer him to a neuropsychiatrist.

I want to say one thing in regard to Dr. Chamberlain's paper. As I say we can not expect all specialists to specialize in every line. Therefore, give some credit to the man who has specialized in neuro psychossis so that he may help such patients to make that adjustment which is so much desired.

Dr. Edward F. Parker: Ordinarily you cannot discuss a psychiatrist's paper, because you are dealing with the constant warfare between the conscious and unconscious libido. The conscious get over the top and become unconscious get conscious again and conflict continues ad infinitum.

But Dr. Chamberlain, I think, has presented a very practical paper. I have been trying to get some of my friends to realize that you can take out the tonsils and the appendix, have all the teeth pulled out, the sinuses opened and irrigated,—and the patient will still have the same symptoms. In a great many patients you have got to find somebody that ought to be knocked in the head, or something that is gnawing on the nerves before a cure can be expected.

Some years ago I had a patient who was happily married, and had a number of children. The first husband died and she married again. He lost her money and his own and was confined in a neurological institute. She happened to go to New York and had one of those periodic health examinations and returned with one of those typewritten statements, ordinarily worth \$50 to read, reporting everything negative but "Infected Tonsils." I wired "By what method did you determine Tonsils were infected or infecting her and what are infected tonsils?" The prompt reply was "Sorry to say we made no tests but think her resistance will be increased by removal." I had to operate because it had been suggested. When the second husband died the results were wonderful!

We internists know that this is just the type that Dr. J. S. Fouche, Columbia: To my mind, this is one of the most important papers I have heard.

falls into our hands. We have these patients to come to us. Even, we have surgeons to operate on appendices, and they go crazy, and they ask the internist to come in and see them, and get them into the State Hospital.

The patients, as a rule, are unhappy. I think Dr. Parker is on the right track. If you go into the history of these patients it is the most important part of the examination to get all the details, and you will find out in a majority of the cases if they are married people they don't love their husband; or they are poor and don't want to be poor; and they have had some misfortune and trying to blame it on their health. It is very important to make a complete history of these patients—including the examination of the rectum! Then your physical findings may be all negative, but in all cases you will find the history will give you the answer to the situation.

I have two patients on my hands right now I will give anybody the fees to take them. I want to ask this question:

One is a married woman on a so-called rest cure. She was getting along very well. first two weeks every complaint seemed solved. The last time I saw her she said she had mucous colitis. I asked her how she knew she had mucous colitis. She said, "My bowels acted and I had a large movement and it had a whole lot of mucus in it." The trained nurse followed me out of the door and said, "All the mucus in that stool came from that woman's nose and throat." I am going to believe the nurse. Why do people lie like that? She is a very religious type—reads her Bible all the time; quite a missionary worker in the church, and takes a good deal of stock in that. The only thing is-I think her husband makes a good living, pays his bills promptly certainly, and they live in ordinary style-and the only thing is he is the UGLIEST white man I ever saw in my life!

Another patient is a young girl, been examined by several physicians and surgeons and they did not find anything. She goes into so-called spells of unconsciousness. After thorough examination I found basal metabolism to be 26. She had been in love with a Marine; this Marine had been going to China—and I believe that had something to do with it.

Dr. Robert Wilson, Charleston: It seems to me this discussion has gotten into a field it was not intended to get into. I believe he meant that every patient that comes to us with a physical ailment there is a side which we do not reach if we devote our attention exclusively to the physical examination; that he wants to impress upon us that in every instance there is a spiritual as well as a physical side to the patient whom we are examining. The age we live in is a scientific

age and it is a machine age too, and the machine habit is a vice. A great deal of our work is done by machinery. The history is taken by someone; the laboratory examination by others; and oftimes the diagnosis rests upon the results of laboratory examinations and not upon the sum total of our findings evaluated by the personal understanding of the person. That is the important point that has been developed in this subject.

When Dr. Chamberlain says an Army, for instance, is greater than the sum total of the individual units, he meant to carry that a little further. We may take an equally large body of men and the total activity of that group of men is inferior to the sum total, of the individual The difference is, one body of men is dominated by a will, and stimulated and moved by a spirit which is controlled and regulated by that will; the other is an absolutely uncontrolled mass of units. One patient is self-contained, dominated by a will and spirit that we can not exactly put our hands on, and according to the strength of that will and the influence of the spiritual, will be the dominating force of that person.

It is very hard for us to get into those things, and I do not know if we can teach them that certain things—fundamental principles, behavior, and so on—but the way to do it has got to be done by personal experience. But the majority of us have learned it by years of experience, provided we have tried to get away from machine methods and reach a side of that patient and get away from the ordinary machine methods which we use every day.

Dr. J. H. Cannon, Charleston: I just want to mention one more thing that I think might deserve emphasis: That is, patients come in, not complaining and not with psycho neurosis: These patients do not come in with nervous symptoms so apparent that one would feel justified in referring them to a psychiatrist; they come in emphasizing a physical symptom, and the point he is bringing out is, it is not the physical but he is simply emphasizing his neurotic condition through the physical.

Dr. F. M. Durham, Columbia: It used to be the hardest thing was to get people on the operating table; and now the hardest thing we have to do is to keep people off of the operating table.

I have a patient. Her husband is quite a wealthy man. She came to me recently and said, "Doctor I have had my abdomen opened in 16 places; tell me what the 17th shall be." I said, "You don't need an operation." She said, "Oh, yes I do—I need one." I said, "Let's wait and

see." So I examined her. Her abdomen looked like a new map of the Balkan States. I sent her to the hospital. She got on the upper floor, and out on the piaza and when I got up there she was entertaining the ladies on the porch by saying, Dr. So and So in New Orleans had operated on her for one thing; and another in Georgia for something else—what all they had done—and had all the patients on the porch spellbound. I examined her thoroughly. I said, "I don't think you need an operation," and she said, "Yes I do." Then I proctoscoped her. I gave her a dose of castor oil and sent her home!

She was operated on in Richmond, Virginia, in less than three months time; and I have seen her in hospitals three times since.

Dr. O. B. Chamberlain, Charleston: I have nothing more to add, it is so late. I want to thank everybody for discussing the paper. There is just one thing I am not bound to answer. Dr. Fouche asked a question. He said he had a patient under his care whose husband was the ugliest man in the world; and she improved considerably under him (Fouche) for two weeks!

EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

CHRONIC OTORRHOEA

The Eye, Ear, Nose and Throat Monthly, February, 1928

N. Reese Guttman, in the Illinois Medical Journal, analyzes his results in treating chronic otorrhoea with Calot's solution. He gives Fotiade the credit of first using this solution which is composed as follows: Guaiacol, one mil: creosote, five grammes; ether, thirty cubic centimeters; iodoform, ten grammes; olive oil, seventy cubic centimeters. The pharmacodynamics of the mixture has been investigated. The iodine, guaiacol and creosote are found to exert a caustic action on granulations as well as being antiseptic. The ether dissolves secretions covering the diseased areas, thus allowing access of the other ingredients. Further the solution causes active diapedesis of the polymorpho-nuclear leucocytes, aiding bacteriolysis. The usual routine procedure, such as treating an unhealthy naso-pharynx, Eustachian obstruction, removal of granulations or polypi, et cetera, should first be carried out. Fotiade in his series of sixty-four cases claimed 95 per cent of cures. Among the failures one patient died of tuberculosis, one required a radical mastoid operation, and in one the result was unknown. The author's series of eighty-one cases was made up as follows: (1) Otorrhoea with no mastoid involvement shown by X-rays, thirtyone; (2) otorrhoea with mastoid sclerosis shown by X-rays, thirty-eight; (3) otorrhoea with cholesteatoma, twelve. All patients in Class (1) were cured. Thirty-five were cured in Class (2), the other three requiring radical operations. None of Class (3) responded to treatment, but the odor was noted to be less. Although Fotiade claimed cures in cases of cholestaetoma, the author thinks that radical mastoid operation is still the only treatment for this class of condition. The mode of treatment is as follows: The ear is first cleansed, mainly by the use of tubular suction; five to ten drops of the solution are then instilled into the auricular canal which is then closed by pushing the tragus against the canal wall and bringing alternate pressure to bear upon it. This has an effect of a pumping action upon the mixture. causing it to be forced into the cavus. If this maneuver is properly performed, the patient will taste the medicament in his throat. The treatment is carried out once a day for one week, when the secretion will be found to have changed from a ropy to a thin serous discharge. Insufflations of boric power are then used and the discharge will dry up within a few days.

I have found Mercurochrome in various strengths with Alcohol and Glycerine very valuable, with Acriflavine and Alcohol very beneficial as a substitute in various cases. ~~~~~~

WOMAN'S AUXILIARY

South Carolina Medical Association

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Lancaster, S. C., December 29, 1928.

Mrs. Daisy Lee Stucky, President,

S. C. Woman's Auxiliary to S. C. Medical Asso., Sumter, S. C.

Dear Mrs. Stucky:

Your letter of December th was received in my absence from home. I am glad to have the privilege of contributing towards the Dr. J. Marion Sims Memorial. He was one of the most wonderful surgeons of his time and I am proud that he was born in Lancaster County of humble parentage and that he should have risen to such prominence.

He was a pioneer in surgery who relieved the women of not only this country but throughout Europe. It is a matter of history that he was consulted and operated in the families of the crowned heads of Europe, by whom he was decorated. My own dear mother only had one minor operation, which he performed and it gave her immediate relief.

I am enclosing you my check for \$500, which I am glad for you to use towards a perpetual memorial to him. As you state I feel that I am honoring myself in contributing to this fund. I understand Mrs. Springs has also contributed.

With personal regards and best wishes, in which Mrs. Springs joins, I am,

Yours very sincerely,

Leroy Springs.

WESTERN UNION

Received at

137CF WA 124 NL 4 EXTRA

Columbia, S. C., February 16, 1928

Mrs. Henry Stuckey,

Hampton Ave., Sumter, S. C.

Recently it came to our attention that you of the Woman's Auxiliary are planning to erect a memorial to the great alumnus of this institution, Marion Sims, and we hope that it may be put on the campus. Somehow I have not known of the venture but students are most enthusiastic that the name of this great doctor may act as a perpetual inspiration to those who are here studying pre-Med. It will also inspire other students to emulate him as a successful man. In the next few days you will receive a petition of one thousand names asking that it be placed here. I hope that you and your committee will favor us. Letter follows.

Thos. Moore Craig, Pres. of Student Body. 953P

University of South Carolina.

SOCIETY REPORTS

CLARENDON COUNTY MEDICAL SOCIETY MEETING

At the regular meeting of the Clarendon County Medical Association, held at the offices of Drs. Carrigan & Stukes, in Summerton, S. C., on Tuesday, February 28, 1928. Drs. Geiger, Harvin & Davis of Manning, with Drs. Carrigan & Stukes, from Summerton, S. C., were present, Drs. Shaw & Weinberg from Sumter, S. C., were invited guests. Before the meeting was called to order, the Association with the invited guests were entertained at dinner at the Summerton Hotel, as guests of Drs. Carrigan & Stukes. After dinner, the doctors were inviited to the offices of the Drs. Carrigan & Stukes, these offices, with the laboratories and operating rooms, are connected with folding doors, these were all thrown open to the attending doctors, the meeting was called to order by the retiring president, Dr. W. Scott Harvin, the meeting proceeded with the regular business, first the election of officers for the coming year, i. e.

President, Dr. W. H. Carrigan, Summerton,

Vice-President, Dr. C. B. Geiger, Manning, S. C. Secretary and Treasurer, Dr. L. C. Stukes, Summerton, S. C.

Delegate to S. C. Medical Meeting at Columbia, Dr. W. Scott Harvin, Manning, S. C.

The members then enjoyed a very interesting and instructive paper with slides from Dr. Milton Weinberg, on some of the pathological conditions of the genito-urinary tract. Then a paper was read and enjoyed by all present, on the diagnostic and prognostic value of the sedimentation test by Dr. Carrigan.

L. C. Stukes, Secretary and Treasurer.

MEDICAL SOCIETY OF SOUTH CAROLINA— CHARLESTON

Introductory remarks of Dr. Edward F. Parker at the meeting of the Medical Society of South Carolina, February 28, 1928.

"For you it is a Rose, for me it is my Heart."

The honor of presenting our guest Dr. J. W. Jervey I admit requesting, with reasonable hope that I could do it adequately and a certain faith that he would justify my high appraisal of his versatile talents and professional attainments.

On this occasion he elects "The Paranasal Sinuses," but endowed by inheritance with an ease and elegance of speech he has the power to illumine any subject with rare culture and ready wit.

Some years ago with an acquisitive mind and qualified training he settled in the town, which, aided by his ambitious activities, is now the City of Greenville. There with courage to build and ability to successfully conduct a private modern Eye, Ear and Throat Hospital he has by accomplishments and membership in notable national societies won the esteem and admiration of leading men in his specialty.

Born and bred in Charleston we are proud of his achievements and as a distinguished Ophthalmologist and Otolaryngologist have invited him to address us.

MEETING OF THE DARLINGTON MEDICAL SOCIETY FEBRUARY 16, 1928

A meeting of The Darlington County Medical Society was held tonight at Hotel McFall, in Darlington. In the absence of the President, Dr. W. J. Beasley, Dr. J. M. Willcox presided over the meeting until called away when Dr. A. B. Hooton took the chair.

The minutes of the last meeting were read and approved.

Dr. Egleston reported a very unusual case of appendicitis in a boy.

Dr. A. D. Gregg was given a transfer of membership to become a member of The Greensboro Medical Society of North Carolina.

A review of the questionaire sent out with reference to the Tonsil and Adenoid Clinics showed that the majority of the doctors in the Society were not in favor of continuing them. Short talks on this subject were made by Drs. Egleston, Powe, Hill, and Hooton.

The chair appointed Drs. Egleston, Hill, and Alexander as a committee to nominate officers of the Society and a delegate to the State Association meeting. The following were nominated and duly elected:

President-McIver Wilcox.

First Vice-Pres.—E. H. King.

Second Vice-Pres .- O. A. Alexander.

Treasurer-J. W. Willcox.

Secretary-Julian T. Coggeshall.

Censor-W. A. Carrigan.

Delegate to State Association—W. A. Carrigan.

Alternate Delegate-C. C. Hill.

On motion of Dr. Powe the secretary was instructed to write Dr. W. A. Mulherin, of Augusta, and ask him to address the Society on, "The Feeding of the Sick Infant," at a date suitable to his convenience.

On motion of Dr. Egleston the secretary was instructed to ask Miss Petteway, Secretary of

the County Tuberculosis Association, to procure the motion picture film "Let the Doctor Decide" and have it shown in the county under the auspices of The County Tuberculosis Association and the County Health Unit.

The meeting adjourned.

Present at this meeting: Egleston, Powe, Carrigan, Edwards, Hill, J. W. Willcox, J. McI. Willcox, Hooten, Alexander, Coggeshall.

Julian T. Coggeshall, Secretary.

MINUTES OF THE FLORENCE COUNTY MEDICAL SOCIETY, TUESDAY, NIGHT, FEBRUARY 14, 1928

The meeting was called to order at 8:00 P. M. by the President, Dr. E. A. Simmons, a delightful fish stew was served. There were about twenty-five members present, one of the best meetings that we have had in some time.

Dr. E. A. Simmons and Dr. M. R. Mobley were elected delegates to the State medical meeting to be held in Columbia in April.

After the regular business was dispensed with the regular scientific program was entered into.

Dr. J. W. Jervey of Greenville was first on the program and delivered a very fine paper and one that was enjoyed by all on 'Infections of the para-nasal sinuses.' Dr. Jervey's paper was discussed by Drs. Mobley, Lucas and Mead, Dr. Jervey in closing the discussion answered many questions that were asked by the doctors very cleverly.

Next on the program was Dr. Hugh Smith of Greenville, Dr. Smith very forcibly brought to us a paper which we all need in our every day life and one that we all need to know more about, the title of Dr. Smith's paper was 'Our common diet and its faults.' Dr. Smith's paper was discussed by Drs. Mead, F. M. McLeod, Mobley and Jervey.

A neat sum was raised at this meeting for the Sims Memorial.

Dr. Hawkins Jenkins, of Mullins was our delightful guest during the evening.

There being no further business the society was adjourned.

E. E. Herlong, Secretary.

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SOCIETY HELD IN THE DIRECTORS' ROOM OF THE CHAMBER OF COMMERCE, MONDAY, FEB-RUARY 6, 1928.

The meeting was called to order by President Johnson at 8:20 P. M. with about thirty members present.

The minutes of the last meeting were read and approved as read.

Reports of clinical cases were then called for.

Dr. Powe reported a case of encephalitis lethargica, with gradual paralysis of the left side; all serological cases proved negative. Dr. Davis reported a case of stone in the kidney with hydronephrosis and staphylococcus infection. The kidney was previously removed but the stone was left in the ureter. Ureteral stricture developed and the patient was treated for gonorrhoea, however, the stricture proved to be the same stone which had lodged in the urethra. Removal of the stone at operation resulted in alleviation of the patient's symptoms. Dr. Davis then reported the progress of his work in using the Stearns' electrotome. Dr. McCalla reported an interesting case of intestinal obstruction caused by a band of tissue.

The President then called on Dr. W. T. Brockman of Greer, who presented a very instructive and helpful paper on "Rectal Infections." Dr. Brockman first stated that the most common rectal infections were ischio-rectal abscess and fistula; he further stated that there are many unlecognized low-grade infections of the rectum which are very common at the same time giving a great deal of trouble to the patient. In these infections we are very apt to find debauchery and dissipation.

In discussing haemorrhoids, it was stated that they were usually the result of infection in the haemorrhoidal veins, usually traceable to some focus of infection. The infection may also enter the veins through ulcers and fissures.

Dr. Brockman paid tribute to the dentists and eye, ear, nose and throat surgeons for the important work they are doing in the eradication of foci of infection. Dr. Brockman was of the opinion that many of the rectal infections are due to sepsis in the mouth. Tight sphincters are usually due to pathology in the rectum; this increased tonicity of the sphincter is also attributed to fistulae. In cases of tight anal sphincters dilatation and proctoscopy are indicated. Constipation cannot be cured without the arrest of an infectious process in the rectum, and in this treatment irrigation with argyrol and sodium bicarbonate have proved of value. Early infections should be sought for, thereby preventing more serious conditions. Discussed by Drs. Powe, Tyler, Kluttz, and Davis; closed by Dr. Brockman.

Dr. Hugh Smith then presented his excellent paper on "Dietary Deficiency in South Carolina." He mentioned McArrison's findings in the Himalaya Mountains, where this author found that intestinal diseases were very rare owing to the well-balanced diet consumed by the natives. In discussing pellagra, Dr. Smith stated that he believed that the disease was due to both dietary deficiency and to infection. He also gave convincing proof that dental caries is due to faulty diet; fresh meat, vegetables and milk are essen-

tial to proper tooth development in the foetus as well as in the adult.

Constipation is also attributed to faulty diet, and may be corrected by fruits and vegetables. Dr. Smith then reminded us that hominy, rice, white bread, potatoes, sugar and meat are too common in our diet, and that such a diet is too rich in starch. In such a diet there is no bulk, and too little, if any vitamines.

Pernicious anaemia is now attributed to faulty diet, as liver and a diet rich in vitamines are markedly beneficial to patients. Dr. Smith also urged that physicians pay more attention to their patients' diets. Scurvy, beriberi and rickets were classed as diseases in which there had been gross deprivation of the necessary vitamines, whereas diets that are slightly deficient in these necessary articles may give rise to lessened resistance to infections. Discussed by Drs. Barksdale, W. T. Brockman and Davis; closed by Dr. Smith.

The Secretary advised the members of the Society that "Early Diagnosis Week" sponsored by the National Tuberculosis Association would be observed all over the county in March, and requested the members to endorse this at the same time requesting that a specially appointed committee be set to work on this educational effort. Dr. Tyler moved that the Society go on record as endorsing this plan; seconded and carried. President Johnston appointed Drs. Wilkinson, Evatt, Wolfe, and Hugh Smith to serve on this Committee.

The question of a banquet being held in March was brought up in event the Programme Committee should secure Dr. Bloodgood as essayist. Dr. Powe moved that the Programme Committee work out the details of this matter; seconded and carried.

The Secretary then requested the members to make some disposition of the remainder of the fund collected from the members for the late Dr. S. J. Taylor. Dr. Tyler moved that this money be turned over to the Treasurer; seconded and carried.

There being not further business, the meeting adjourned.

Irving S. Barksdale, M. D., Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY, FEBRUARY 14, 1928, AT 8:30 P. M.

Meeting was called to order by the President, Dr. Harry P. Jackson.

Present: Doctors Allen, B. R. Baker, Ball, Banov, Beach, Boette, Bowers, Buist, Burn, Cain, Cannon, Cathcart, de Saussure, Chamberlain, Frampton, Heidt, Jackson, Kollock, LaRoche, Lynch, G. F. McInnes, McCrady, Mitchell, Mood, O'Driscoll, Pearlstine, Phillips, Plowden, Rhame, W. M. Rhett, Rutledge, Sanders, Scharlock, Scott, J. E. Smith, W. A. Smith, Taft, Townsend, Walsh, Waring, Wild, I. R. Wilson, (42).

Guests: Dr. Laning, U. S. Navy; Dr. Thompson Fraser of Asheville, N. C.; Dr. John A. Smith, of New York City; Dr. W. H. Prioleau, Hospital Internes and Medical Students.

Minutes of January 24th were read and confirmed.

Under "Candidates to be ballotted for," the Secretary announced the application of Dr. W. H. Prioleau, of Charleston, had been approved by the Board of Censors. The President directed that the ballots be taken and Dr. Prioleau was unanimously elected. The President directed the Secretary to notify Dr. Prioleau of his election to membership in this Society, and request him to be present at the next meeting in order that he might sign the Constitution.

The Secretary read a letter from Mrs. Ashley Halsey, Executive Secretary of the Charleston County Tuberculosis Association, asking the endorsement of this Society for the "Early Diagnosis Campaign" which would be started in March under the auspices of this Association for the detection of tuberculosis in its early stages. It was moved and carried that this Society endorse the project, and offer the assistance of the Medical Society in making it a success.

Dr. John A. Smith, of the National Tuberculosis Association, discussed the purpose of the campaign at the request of the Secretary. The motion was carried unanimously.

The President reported that he had clipped coupons of bonds belonging to the Alston bequest amounting to \$292.20, and that he had turned over this amount to Dr. G. McF. Mood, Treasurer of the Board of Finance. (See Report).

Dr. R. S. Cathcart, Chairman of the Committee, presented Resolutions on the death of Dr. T. Grange Simons. It was moved, seconded and carried that these Resolutions be adopted by a standing vote.

The Secretary read a letter from Dr. Leon Banov, City Health Officer, asking the endorsement of this Society for the Campaign of Education against Diphtheria in the use of toxinantitoxin. It was moved, seconded, and carried that this Society endorse this movement.

Dr. R. S. Cathcart requested information as to the recently published statement that the Board of Health of South Carolina had resorted to unethical means in its endeavor to have this State placed again in the registration area for births. Dr. Leon Banov explained that he had obtained information from the State Health officer which showed that this criticism was unfair, and that Washington had ordered the agent from the Department of Vital Statistics to return to South Carolina.

The President announced the death of Dr. Ernest C. Baynard, one of the valued members of this Society, which had occurred February 8th. It was moved, seconded and carried that the President appoint a Committee to draw up Resolutions of respect upon the death of Dr. Baynard. The President appointed Drs. LaRoche, Lynch and Ravenel.

At 9 P. M. the Scientific Program was called. The President introduced Dr. John A. Smith, Executive Secretary of the American Heart Association, New York City. Dr. Smith read a comprehensive paper on the prevalence of Heart Disease, and illustrated his remarks by using charts.

At the conclusion of Dr. Smith's paper, the President introduced Dr. Thompson Fraser, of Asheville, N. C., who gave a valuable paper on Heart Disease, stressing its clinical aspect. Dr. Lynch and Dr. Cannon discussed these papers. Both of the guests, in concluding the discussion, complimented the cardio-vascular service of the Roper Hospital for the fine records and the excellent service that is being given.

The meeting then adjourned to partake of a buffet supper, which the Program Committee had arranged.

Approved:

W. Atmar Smith, Secretary.

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A CORRECTION

Owing to circumstances over which the Journal had no control, an illustration plate of a salesman in conversation with a doctor was omitted from Squibb & Sons page announcement on the back cover of our January issue. The plate indicated the salesman was in earnest conversation with the physician, and the picture tied up with the printed matter which was in quotations.

We regret the omission of the illustration plate and make this explanation so that any reader who misunderstood the purpose of the quotation may know that the picture should have appeared in the advertisement.

BOOK REVIEWS

CRAWFORD W. LONG-THE DISCOVERY OF ETHER ANESTHESIA—By Frances Long Taylor with a foreword by Francis R. Packard, M. D. With eight full page plates. Paul B. Hoeber, Inc., New York, 1928. Mrs. Taylor has rendered a distinct service to the scientific world in setting forth the now well recognized claims of her distinguished father of being the first to administer ether in a surgical operation. The book is fascinating, especially to the Southern reader. It is worthy of note that Dr. J. Marion Sims the great surgeon a native of South Carolina is credited with the honor of putting in motion the train of circumstances that brought Long's experiments forcifully to the attention of this country and Europe.

LOCAL ANESTHESIA—By Geza de Takats, M. D., Asst. Prof. of Surgery, Northwestern University, School of Medicine, Chicago, Ill., with an introduction by Allen B. Kanavel, M.D., Prof. of Surgery, Northwestern University, Medical School. Octavo of 221 pages with 117 illustrations. Cloth, \$4.00. Philadelphia & London: W. B. Saunders Company, 1928. It is a worthy effort that of bringing sharply to the forefront the increasing fields of surgery in which local anesthesia may be substituted for general anesthesia. The author of this work deserves commendation for his admirable illustrations and clear cut text.

GYNECOLOGY—By Howard A. Kelly, A. B., M. D., LL. D., and Collaborators. D. Appleton and Company, New York, London. Howard Kelly is one of the men still living who carried the fame of the Johns Hopkins Medical School to the four corners of the earth. His writings and the wonderful illustrations in all of his works are well known everywhere. This book is no less worthy of special favor at the hands of the Amercan doctor than many others hitherto published on this subject by the author. Dr. Kelly has many collaborators of eminent ability.

NEOPLASTIC DISEASES—A treatise on Tumors. By James Ewing, M. D., Sc.D., Professor of Pathology at Cornell University Medical College, New York City, Third Edition, Revised and Enlarged. Octavo of 1127 pages with 546 illustrations. Philadelphia and London:

W. B. Saunders Company, 1928. Cloth \$14.00 net. This is one of the most authoritative books published in this country. It continues to be a leading text book in many medical schools.

GENERAL INDEX TO VOLUMES I TO III OF BLUMER'S BEDSIDE DIAGNOSIS—Philadelphia and London. W. B. Saunders Company, 1928.

BEDSIDE DIAGNOSIS—By American Authors, edited by George Blumer, M. D., Clinical Professor of Medicine, Yale University, School of Medicine; Attending Physician to the New Haven Hospital. Three Octavo volumes, totalling 2,820 pages, containing 890 illustrations. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$30.00 a set. Separate desk index volume free. These volumes have been written from the standpoint of practical diagnosis in the busy bedside work of the physician either in the hospital or in the home. Laboratory methods are of course considered valuable aids but the writer stresses the simpler methods available everywhere and at the command of any competent physician. It is perhaps the most comprehensive presentation of the subject from this standpoint yet published in this country.

THE MEDICAL CLINICS OF NORTH AMERICA (Issued serially, one number every other month). Volume 11, Number 4, (Brooklyn Number, January, 1928.) Octavo of 277 pages with 53 illustrations. Per Clinic year, July, 1927 to May, 1928. Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London: W. B. Saunders Company.

THE MEDICAL CLINICS OF NORTH AMERICA (Issued serially, one number every other month.) Volume 11, Number 5, (Tulane University Number, March, 1928), Octavo of 261 pages with 35 illustrations. Per Clinic year, July, 1927 to May, 1928. Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London: W. B. Saunders Company.

ALUMNI COMPOUNDS IN FOOD—Including a Digest of the Report of the Referee Board of Scientific Experts on the Influence of Aluminum Compounds on the Nutrition and Health

of Man. By Ernest Ellsworth Smith, Ph.D., M. D., Fellow and Former President, New York Academy of Sciences, Fellow of the New York Academy of Medicine, etc., etc. Paul B. Hoeber, Inc., 76 Fifth Avenue, New York City. There has never been a time in which the elements of nutrition have been studied so carefully and exhaustively. The experiments here presented should be of interest not only to the medical profession but to intelligent people in all walks of life.

NEWS ITEMS

The Chiropractic Bill passed the House this year in the Legislature but thanks to the prompt response to the call of the Legislative Committee, of which Dr. M. H. Wyman is Chairman, the profession of the State was able to influence the Senate to defeat the Bill thirty-four to four.

Mrs. W. J. Baggott, of Wagener, S. C., mother of Dr. B. H. Baggott, Treasurer of the Columbia Medical Society, died February 11th, after an illness of four months.

Dr. D. L. Smith, President of the South Carolina Medical Association delivered an address before the Medical Institute of the Georgia State Medical Society at Athens, March 8th, on Upper Respiratory Infections in Childhood. President Smith delivered a similar address before the Medical Society of South Carolina at Charleston, March 13th.

The Secretary Editor of the South Carolina Medical Association was an invited guest and presented the claims of organized medicine before the Medical Society of South Carolina at Charleston at its March meeting.

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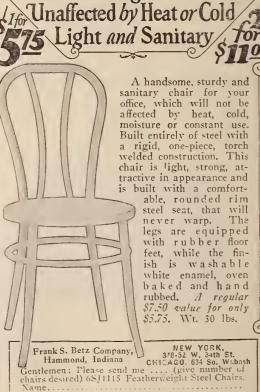
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The Journal

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NO. 4

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- NERVOUS AND MENTAL DISEASES
 E. L. HORGER, M. D., State Hospital, Columbia, S. C.
 - MEDICAL RESERVE CORPS
- COL. J. E. DANIEL, Med. Res. Greenville, S. C.

EDITORIAL

HOUSE OF DELEGATES TO TAKE ACTION ON EXPERT TESTIMONY

The resolutions below after full and free discussion by the Medical Society of South Carolina were adopted at the meeting held March 13. We urge our members to give careful attention to this matter before the House of Delegates meets in order that due eonsideration may be given to all the points at issue. It is obvious that the resolutions call sharply to our attention the need for certain reforms in the whole problem of the employment of expert medical witnesses. A few states, notably New York, through the State Medical Society and the State Bar Association have endeavored to bring about a more satisfactory situation than obtains at present. We believe these resolutions point the way to improvement over methods hitherto in vogue.

If the Bill sponsored by the Charleston

Society should become a law many other States will probably follow the precedent set by South Carolina.

JOINT REPORT OF THE BOARD OF CENSORS AND SPECIAL COMMITTEE OF THE MEDI-CAL SOCIETY OF SOUTH CAROLINA ON EXPERT MEDICAL TESTIMONY

February 28, 1928.

WHEREAS, The present court procedure in expert opinion evidence in both civil and criminal cases sometimes tends to defeat instead of promote the administration of justice, and has in many instances brought public criticism on the medical and legal professions; therefore be it

RESOLVED, That the Medical Society of South Carolina recognizes the urgent need for remedial legislation and change in court procedure; and further be it

RESOLVED, That the Medical Society of South Carolina recognizes the need for grave consideration of the character of expert opinion testimony which members of the medical profession are frequently called upon to give, and deplores the



Views of the University of South Carolina

fact that sometimes expert medical testimony is not of the high character which it should be, and further be it

RESOLVED, That this Society endorses and recommends for promotion by the State Medical Association of South Carolina before the General Legislative Assembly of the State, the following

Bill To Regulate Expert Medical Testimony

SECTION 1. SUMMONING OF WITNESSES BY COURT. Where the existence of mental or

physical disease or derangement on the part of any person becomes an issue in the trial of a case, the judge of the trial court may summon one or more disinterested qualified experts, not exceeding three, to be nominated by the president of the medical society of the county in which the court is held, to testify at the trial. In case the judge should issue the summons before the trial is begun, he shall notify counsel for both parties in the case. Such summoning of witnesses by the court shall not prevent either

party from using other expert medical witnesses at the trial.

SEC. 2. EXAMINATION OF ACCUSED BY STATE'S WITNESS. In criminal cases, no testimony regarding the mental condition of the accused shall be received from the expert medical witnesses summoned by the accused until the expert medical witnesses summoned by the State have been given an opportunity to examine the accused.

SEC. 3. EXAMINATION BY COURT'S WITNESS. In civil cases, where expert medical witnesses have been summoned by the court, no testimony regarding the physical condition of the plaintiff shall be received from plaintiff's medical witness or witnesses until the medical witness or witnesses summoned by the court shall have been given an opportunity to examine the plaintiff.

SEC. 4. COMMITTMENT FOR OBSERVA-TION. Whenever in the trial of a criminal case, the existence of mental disease on the part of the accused, either at the time of the trial or at the time of commission of the alleged wrongful act, becomes an issue in the case, the judge of the court before which the accused is to be tried may commit the accused to the State Hospital for the Insane, to be detained there for purposes of observation for a period of ten days, providing that the court may extend the time upon the advice of the chief physician of the hospital, but not longer than the first day of the next term of the criminal court before which the accused is to be tried. The court shall direct the superintendent of the hospital to permit all the expert witnesses summoned in the case to have free access to the accused for the purpose of observation. The court may also direct the chief physician of the hospital to prepare a report regarding the mental condition of the accused. This report may be introduced in evidence at the trial under the oath of said chief physician, who may be cross-examined regarding the report by counsel for both sides.

SEC. 5. WRITTEN REPORT BY WITNESS-ES. Each expert medical witness may prepare a written report upon the condition of the person in question, a copy of which shall be submitted to counsel for both sides as soon as prepared, and such report may be read by the witness at the trial, subject to further examination and cross-examination. If the witness was summoned by the court, he may be cross-examined by counsel for both parties.

SEC. 6. CONSULTATION OF WITNESSES. Where expert medical witnesses have examined the person whose mental or physical condition is an element in the case, they may consult before testifying, with or without the direction of the court, and may prepare a joint report to be

introduced at the trial, subject to examination and cross-examination as above.

AND FURTHER BE IT

RESOLVED, That the Medical Society of South Carolina shall have appointed annually by its President, a committee of three, whose duty it shall be to review and report upon any expert medical testimony given before a trial court in this County, whenever requested by the Society to do so.

Charles W. Kollock, M. D., Chmn., M. W. Beach, M. D., Olin B. Chamberlain, M. D., Board of Censors. Robert Wilson, M. D., R. H. Cathcart, M. D., Kenneth M. Lynch, M. D.,

Special Committee.

February 28, 1928.

LATEST NEWS ITEMS ABOUT COLUMBIA MEETING

Wednesday morning, April 18, at nine-thirty following Drs. Wilson's and Lynch's clinic in the ball room of the Jefferson Hotel the scientific program will be taken up very punctually. The Scientific program will continue in the ball room of the Jefferson Hotel until about twelve o'clock when the ball room will be turned over to the management of the Hotel for the Alumni Luncheon which will be held at one-thirty on Wednesday. From twelve until the luncheon hour at one-thirty the scientific program will be continued in a nearby meeting place to be announced later.

The Alumni Luncheon will be stressed at this meeting and it is urged and insisted in so far as propriety will allow that all doctors buy a ticket to the Alumni Luncheon when they register. The charges for the luncheon will be only \$1.00 and every doctor in attendance upon the Association, whether a graduate of Charleston Medical School or not, will be urged to be present. The Columbia doctors have been requested not to entertain visitors at luncheon on Wednesday so that all may attend the Alumni meeting.

After the ball room is rearranged, following the luncheon, for the scientific program no interruption will be had in the program by change of meeting place.

On Wednesday evening at ten o'clock a reception followed by a dance will be tendered the President and our visitors in the



Scenes of Ridgewood Club, Forest Lake Club, and Lakeview Club.

Jefferson Hotel. At the reception golf prizes and trophies will be awarded and a brief entertainment conducted by Dr. Robert Gibbes of Columbia will be offered for those present.

A number of firms have made arrangements to present worth-while exhibits.

The Committees in charge of the Columbia meeting are as follows:

Committee on Arrangements: Dr. Marion H. Wyman, General Chairman.

Golf Committee: Dr. Robert Gibbes, Chairman, Dr. R. B. Durham, Dr. P. B. Mikell, Dr. Theo. Dubose, Jr., Dr. R. G. Doughty, Dr. S. E. Wheeler.

Place of Meeting (In charge of Hall, Lantern, Etc.): Dr. Thos. A. Pitts, Chairman,

Dr. O. B. Mayer, Dr. E. W. Barron, Dr. T. D. Dotterer, Dr. B. F. Wyman, Dr. T. J. Hopkins, Dr. J. H. Young.

Clinics: Dr. J. H. Gibbes, Chairman, Dr. E. L. Horger, Dr. A. F. Burnside, Dr. Geo. Benet, Dr. J. S. Fouche.

Cooperation with Ladies' Auxiliary: Dr. J H. Taylor, Chairman, Dr. Jane B. Guignard, Dr. C. E. Owens, Dr. W. A. Boyd, Dr. F. M. Harvin.

Entertainment: Dr. G. H. Bunch, Chairman, Dr. C. F. Williams, Dr. LeGrande Guerry, Dr. Wm. Weston, Dr. W. J. Bristow, Dr. R. E. Seibels.

Hotels: Dr. Hugh E. Wyman, Dr. B. H. Baggott, Dr. A. T. Moore, Dr. W. E. Saye.

Aside from the scientific program which is under the supervision of the scientific committee of the South Carolina Medical Association, Columbia physicians are planning for the social and scientific entertainment of our visiting physicians and their lady folk.

Both country clubs, Ridgewood and Forest Lake, are extending the privileges of their eighteen-hole golf courses to the visiting doctors free of green fee charges. It will be necessary to complete the golf tournament by lunch time Wednesday and it is hoped that the golfers will come as early Tuesday as possible.

Attractive prizes and trophies will awarded and presented to the winners in the golf tournaments at Wednesday evening's reception.

Another bit of interesting news to golfers is that Bobby Jones will have an exhibition golf match in Columbia during the meeting of the medical association.

Clinics

A clinic will be held Tuesday afternoon at the Jefferson Hotel beginning at three o'clock with the following subjects discussed:

Dr. Wm. A. Boyd-"Presentation of Orthopoedic Cases."

Dr. J. E. Boone-"The Standardized and Intensive Treatment of General Paralysis."

Dr. O. B. Mayer—"The Medical Management of Thyroid Diseases."

Dr. LeGrande Guerry-"The Surgical Management of Hyper-Thyroidism."

Dr. F. D. Rodgers—"The Use of Irradiation in Benign and Malignant Diseases."

Dr. Wm. R. Barron-"Differential Diagnosis of Kidney Lesions with Demonstration of X-Ray Plates."

Following the Tuesday afternoon session Dr. Adams Hayne will entertain the visiting doctors and their wives at a barbecue at his country home at Congaree. Congaree is just a nice half hour's ride on a paved road practically the entire way.

Following the barbecue on Tuesday evening, the Public Health Association will have an evening session to which the public is invited. This session will be held in the Columbia Theatre.

Wednesday morning, the eighteenth, from eight-thirty until nine-thirty, Dr. Robert Wilson and Dr. Kenneth Lynch of Charles. ton will have a clinic of a clinical-pathological nature at meeting headquarters, the Jefferson Hotel.

Thursday morning, Dr. Joseph Earle Moore, of the Department of Syphilology of Johns' Hopkins Hospital will conduct a clinic from eight-thirty to nine-thirty at meeting headquarters, the Jefferson Hotel. The subject presented will be "Some Aspects of the Management of General Paralysis."

"At Your Service and Ride With Me" Committee: Dr. Floyd D. Rodgers, Chairman, Dr. W. R. Barron, Dr. B. D. Caughman, Dr. Frank Durham, Dr. S. E. Fishburne, Dr. P. E. Payne, Dr. G. M. S. Roof, Dr. F. C. Owens.

Registration: Dr. F. M. Routh, Chairman, Dr. F. E. Zemp, Dr. Wm. Weston, Jr., Dr. Manley Hutchison, Dr. S. W. Talbert, Dr. H. W. Rice, Dr. A. E. Shaw, Dr. C. A. Foster.

Publicity: Dr. S. O. Pruitt.

Exhibits: Dr. J. R. Allison.

Dr. L. B. Owens, Mayor of the City of Columbia, and Dr. J. A. Dillard, President of the Columbia Medical Society, are intensely interested and actively cooperating in every way possible for the success of the Columbia meeting.

Firms Requesting: Exhibit Space: Upjohn, B. B. Culture Laboratories, Victor X-Ray Corporation, Powers and Anderson, Winchester Surgical Supply, Kronenberg X-Ray Company, Mellins Food Company, E. R. Squibbs and Sons, Cameron Surgical Supply Company.



Columbia, S. C., Looking Up Main Street From State Capitol.

COLUMBIA, A CONVENTION CITY

Columbia, a city of 65,000 people, is—according to the United States Bureau of the Census, the fastest growing city in the entire Southeast. It is the capitol of South Carolina; it is the political, business, educational, professional, religious and actual center of this state.

The Columbia Medical profession is very active in organized medicine. The Columbia Medical Society has a membership of 93. The several special fields of medicine are well cov-

ered by the various physicians of Columbia. There are ten negro physicians actively engaged in the practice of medicine in the capital city.

Columbia has three hospitals for whites and two hospitals for negroes. The combined capacity of these hospitals, while taxed at times, meets fairly satisfactorily the demands for hospitalization most of the time. The Columbia hospital has a capacity of 125 beds and is a county-owned institution. The South Carolina Baptist Hospital has a capacity of 109 beds and

is owned by the Baptists of South Carolina. The Waverly Sanatarium for nervous patients is privately owned and has a capacity of thirty-five beds. The South Carolina State Hospital has a staff of thirteen doctors with a bed capacity of 2800. The Good Samaritan and Waverly Hospitals for negroes have a capacity of seventy and fifty beds respectively.

In addition to the hospitals described there are two privately owned "Nursing Homes," one for obstetrical patients run by Mrs. C. E. Davis and a "Nursing Home" for medical cases, owned and operated by Mrs. Edith M. Eastway. Both of these homes can take care of about ten patients each very comfortably.

Recent events have designated Columbia as a city with a remarkable future. Columbia has already arrived, but coming events cast their shadows before—shadows of gigantic proportions.

The General Gas and Electric Company of New York, through one of their subsidiaries, the Lexington Water Power Company, is now building one of the world's most remarkable hydroelectric developments but ten miles from Columbia. When completed, the turbines of this development will give an additional 200,000 horse power to the 100,000 already developed near Columbia. An interesting fact relative to this development is that constant power would be maintained even if no additional water flowed over the watershed of the Saluda River for a period of six months.

When completed the lake—Lake Murray—will cover a surface larger than Lake George in New York State. It will be thirty-five miles long, fourteen miles at its widest point, with a shore line of 400 miles. The earthen dam (the largest in the world) will extend more than a mile and an eighth, the dam will be more than 200 feet high.

This development, together with potential developments, will make Columbia one of the greatest Power cities of the nation. Such conditions can not help but develop this community into one of the leading industrial centers of the country.

The enormous dam, now in process of construction, has attracted engineers and sight-seers from every section of the world. Since it is but a short ride from Columbia, over good roads, a great number of doctors will doubtless take advantage of this opportunity to see the beginning of Lake Murray. The officials of the Lexington Water Company extend a cordial invitation to the doctors and their families to visit the dam site.

Another evidence of the progressiveness of the center section of South Carolina is the realization of the long talked of Capital Highway District of which Columbia is the central motiff. Virtually every road of importance leading into

Columbia will be paved, four of which have already been paved to the confines of Richland County.

Columbia is also a recreational center—It supports two large Country Clubs, both of which boast standard eighteen hole golf courses. They are well kept courses, interesting to play and difficult to "par". Doctors and their wives are urged to bring their golf clubs when they come to the annual convention. The managing committees of both clubs have generously proffered the use of their clubrooms and their golf courses and tennis courts to the Columbia Medical Society for the use of their friends during the Annual Convention.

Ample and modern hotel accommodations are assured all who come. Reservations are now being made at Jefferson Hotel, Convention Headquarters, for all who signify their intention of coming to the Annual Convention. Other hotels recommended are the Jerome, DeSoto, Marmac and Imperial.

The educational and cultural advantages of this capital city will prove interesting to many. The University of South Carolina, one of the South's oldest colleges and the capstone of South Carolina education, is amply supported by one of the country's most modern high school systems; by Chicora College for Women, Columbia College for women and two progressive business universities.

In this connection attention is directed to the Columbia Stage Society, through which its members are encouraging the dramatic propensities of the people of this state. This society owns its own theatre. Its productions have won national recognition and its scope is now being widened to bring dramatic appreciation to other communities than its own.

Columbia has often been referred to as a City of Churches—perhaps no city of like population in the entire country has as many nor as pretentious institutions of worship as has Columbia. With the possible exception of St. Michael's in Charleston, no church in the state is as well known as the First Baptist church, in which the articles of secession were signed.

From a standpoint of beauty Columbia is an outstanding city. The State House is one of the most perfect types of gothic architecture to be found anywhere. Columbia's streets are broad, lined with beautiful trees, half revealing comfortable homes.

But no catalog of possessions nor enumeration of advantages can show the real indefinable spirit of this section which, after all, is its greatest asset. The friendliness of its citizens, the conviviality of its business men and professional men, the open doors of its homes marks Columbia as one of the state's pleasantest cities to visit and in which to live.

THE EIGHTIETH ANNUAL SESSION SOUTH CAROLINA MEDICAL ASSO-CIATION, COLUMBIA, APRIL 17TH, 18TH, 19TH

The Official Program for the State meeting has been mailed direct to the members and in this issue of the Journal appears some additional information in order that the publicity may be more fully carried out in detail. For a long time the Columbia profession and our many friends there have been looking forward to our coming. They have endeavored to provide for our comfort, our edification, and our entertainment from every possible standpoint. We feel that the doctors and the members of their families will show their appreciation of this wholehearted hospitality by the greatest attendance the Association has ever had.

PEDIATRIC SEMINAR

Another Post Graduate Course in which South Carolina doctors are interested is that given at Saluda, N. C.

The following letter explains this course:

Spartanburg, S. C., March 17, 1928. Editor of South Carolina Medical Association, Seneca. S. C.

Dear sir: Through the generosity of the Commonwealth Fund, the Southern Pediatric Seminar is able to offer a limited number of scholarships to physicians in our states.

The Southern Pediatric Seminar is a post graduate course of two weeks in the care and feeding of children. This scholarship carries with it all expenses for two weeks stay at Saluda, N. C.

Any Physician in your State is eligible for appointment but we prefer giving them to men over thirty-five years of age, in general practice and in towns of under 2,000 inhabitants.



New Concrete Bridge over Congaree River at foot of Gervais St., Columbia, S. C. Cost of Bridge over one half milion dollars.

Any one interested in receiving this scholarship will communicate with me. The Seminar begins on July 23rd and ends August 4th.

Yours very sincerely, D. Lesesne Smith, M. D., Registrar.

POST GRADUATE COURSE AT THE MEDICAL COLLEGE

The Journal has information from the Dean's office with a tentative schedule of lectures and distinguished speakers from outside of the State to be put on from May 28th to June 9th. Arrangements are rapidly being completed to the end that the wishes of those who plan to attend these courses will be complied with as far as practicable. The State Medical Association through its committee on Medical Education cooperating with the faculty began to seek information from the graduate students of last year and others who contemplate attending this year in regard to ways and means of improving the Post Graduate Course. Every effort will be made to profit by the experience of 1927 and therefore the 1928 course should have an even larger patronage.

THE SIMS MEMORIAL AND ITS FRIENDS

The publicity accorded the Sim's Memorial proposition originally suggested twenty years ago by Dr. S. C. Baker of Sumter, President of the Association at that time, continues to engage the interest of many influential friends far beyond the confines of the State of South Carolina as was the fame of South Carolina's distinguished son. One of these friends, Dr. Dougal Bissell, of New York, Attending Surgeon to the Woman's Hospital, founded by Dr. Sims and who has recently visited our State in the interest of the campaign has sent a substantial contribution to the cause. Another surgeon of national reputation who has likewise contributed to the fund and made valuable suggestions in regard thereto is Dr. I. Shelton Horsley, of Richmond, Va. There are many others whose sustained interest we are pleased to record from time to time.

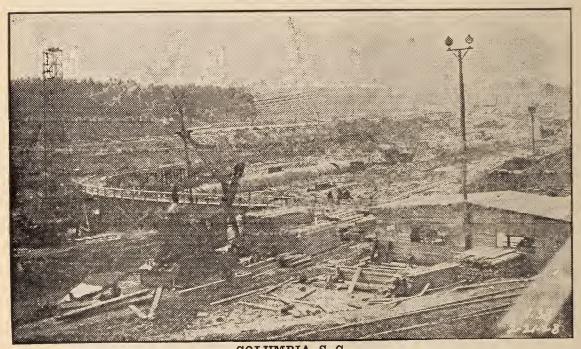
The Woman's Auxiliary deserves very great credit for pushing this campaign to a point where there seems little doubt of its successful consummation.



New State Office Building.



View of City Hall from Capitol Grounds.



COLUMBIA, S. C.

\$20,000,000.00 Project, showing work going forward on mammoth Hydro-Electric development, ten miles from Columbia, when completed will develop 200,000 horse power of electricity. 3000 people now employed on this development which will require three years to complete.

ORIGINAL ARTICLES

TULAREMIA

By S. O. Pruitt, M. D., Director Richland County Health Unit, Columbia, S. C.

Tularemia is a general infection caused by the Bacterium tularense. It is characterized by sudden onset, rigor, prostration, fever and enlarged regional lymph glands. The disease runs its course usually in from two to three weeks.

The etiological factor is Bacterium tularense: this organism was first isolated in 1911 by Mccoy in Tulare County, California. A disease was prevalent among ground squirrels and McCoy's description of the organism was based on a study of thirty-two naturally infected ground squirrels. The name of the disease, as well as that of the causative micro-organism is derived from the name of the county in which the organism was first found: Tulare county is said to have got its name from the Spanish word for the bulrush which grows in such abundance there.

Bacteriology: Bacterium tularense is a small pleomorphic organism, non-motile, gramnegative and non-spore-bearing; it grows only under aerobic conditions; it grows well on coagulated egg-yolk and blood glucose cystine agar, but not on ordinary laboratory media. In cover-glass preparations it stains best with aniline gentian violet. As to morphology: in young cultures both bacilli and cocci are always seen. As the culture grows older there is a decrease of the bacilli with an increase of cocci until finally all become cocci. When an old culture is planted on fresh media the cocci germinate into bacilli.

Geographic Distribution: Tularemia is widely prevalent in the United States. It has been reported in practically all the states except the New England States, Washington, Wisconsin and Michigan. The disease was discovered in Japan in 1925.

Distribution in Nature: Tularemia is found

*Read before the Columbia Medical Society, Columbia, S. C., 1928.

in (1) ground squirrels, (2) wild rabbits and hares, and (3) wild rats.

Transmission to Man: Transmission of tularemia to man occurs by (1) the bite of the horse-fly, or deer-fly; (2) the bite of the wood tick, and (3) the contamination of his hands or conjunctival sac with portions of the internal organs or with the body fluids of infected rabbits, ticks or flies.

Clinical Types: Four clinical types are noted in a study of 220 case reports: (1) Ulceroglandular—papule, ulcer and adenitis; (2) Oculo-glandular—conjunctivitis and adenitis; (3) Glandular—adenitis without primary lesion; (4) Typhoidal—without primary lesion and without glandular enlargements.

Symptoms: the incubation period ranges from one to nine days with an average of slightly more than three days. The onset is sudden, occurring with headache, vomiting, chilliness, chills, aching bodily pains, sweating, prostration and fever. If conjunctivitis is present there is photophobia and the conjunctivitis is usually followed by multiple ulcers of the cornea and the conjunctiva: the case seen by me was of the ulcero-glandular type but both conjunctivitis and photophobia were said to have been present at onset.

Ulcero-glandular Type: the patient complains, within 48 hours after the onset, of pain in the region of the lymph glands which drain the site of infection. On examination these glands are found to be somewhat enlarged and painful: there is a regional, but not a general. glandular enlargement. The enlarged and painful glands are noted about 24 hours before pain or other symptoms are noted at the site of infection: the patient now becomes conscious of a painful area and on examining the site an inflamed papule is noticed. This soon breaks down, liberating a necrotic core and leaving an ulcer about three-eighths inch in diameter with raised edges and having a punched-out appearance. Redness and the other signs of inflammation are present over the regional lymph glands: in about half the cases suppuration occurs. Weakness, recurring chills, loss of weight.

sweats and prostration occur during the active stage of the disease, which usually lasts for two to three weeks.

Oculo-glandular Type: the eyes manifest irritation, redness, lacrimation, edema of the lids and surrounding tissues as well as of the conjunctiva, and usually a papule on the conjunctiva of the lower lid. Coincident with this there are signs of inflammation in the preauricular, parotid, submaxillary, anterior cerviand sometimes in the axillary group. discrete ulcers appear on the conjunctiva of both lids and the constitutional reaction is manifested by fever, chills, sweating, prostration, and, in severe cases, by convulsions, delirium and stupor. Fulminant cases have been recognized only once: this was in a family where four cases of the oculo-glandular type occurred. Three of these cases, in which the symptoms were bilateral, proved fatal; a fourth case, in which the symptoms were unilateral, recovered.

Glandular Type: in this type there is the usual onset and duration without the primary lesion.

Typhoidal Type: fever is the only outstanding symptom. Diagnosis is made by getting negative Widal and positive agglutination test with Bacterium tularense.

Fever: fever is always present in Tularemia. In viewing a number of fever charts one is struck at a glance by the constancy of the sequence of initial rise, remission and secondary rise, the whole febrile period usually lasting about two to three weeks.

Leucocytosis is usually present. Convalescence is slow: a period of six months, or a year, is sometimes required for complete recovery. Relapses sometimes occur.

Prognosis. The death rate is placed at four per cent.

Diagnosis. Cases of Tularemia have been wrongly diagnosed septic infection, typhoid fever, influenza and sporotrichosis because clinicians have not had tularemia as a disease entity in mind. Because of the cross-agglutination of B. tularense with "melitensis" and "abortus" certain serologists have called it undulant fever. On account of the lesions in the lymph glands some pathologists have called it tuberculosis.

No clinician need fail to diagnose Tularemia if the four following factors are kept in mind: (1) the patient gives a history of having dressed or dissected a wild rabbit or of having been bitten by a fly or a tick; (2) a local skin lesion in the form of an indolent ulcer which was preceded by a painful papule, or ulcers of the conjunctiva which were preceded by conjunctivitis; (3) the lymph glands which drain the region of the primary lesion become enlarged and painful; and (4) fever of from two to three weeks duration. In addition to this the physician may confirm his diagnosis by the agglutination test with Bacterium tularense.

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Southern Medicine and Surgery, Vol. 88, No. 5, May, 1926; Vol. 90, No. 2, Feb., 1928.

THE CHOICE OF AN ANESTHETIC WITH SPECIAL REFERENCE TO REGIONAL ANESTHESIA

R. B. McKnight, M. D., Charlotte, N. C.

In choosing an anesthetic, the surgeon must weigh the good and bad qualities of the agent, and the favorable and unfavorable effects which it may produce on the particular patient. The anesthetic should be efficient, should have minimal toxicity, and should be safe during the stage of surgical anesthesia; the induction of anesthesia should be comfortable; relaxation should be produced; and the untoward after effects, such as nausea, emesis, delirium and pulmonary and cardiac complications, should be minimal.

A number of methods of inducing anesthesia are at the surgeon's disposal which may generally be employed with safety and satisfaction, provided the anesthetist has the necessary skill and adeptness in carrying out the various methods of administration. The surgeon should know the pharmacologic action of the agent used, and should be familiar with the experience of others who have used the agent in a large series of cases. Most important of all he should have carefully assessed the patient's general condition. Abnormal function of the

pancreas, hyperthyroidism, poor cardiac compensation, renal insufficiency, certain pathologic changes in the respiratory tract and hypertension or hypotension are each serious enough to prevent the use of some anesthetics as a routine.

General anesthesia may be induced by inhalation, insufflation and rectal or colonic and intravenous administration. Local anesthesia may be induced by local infiltration, spinal injection, posterior splanchnic block and regional nerve block. Many surgeons combine local and general anesthesia for various conditions, and with splendid results.

Since the days of chloroform and ether, the field of general anesthesia has grown very wide as regards both the agent or agents employed and the methods of induction. The safety and reliability of ether by inhalation is, in general, not to be questioned. There are those who advocate the use of chloroform in many and varied types of operation.14 Nitrous oxide and ethylene, particularly the latter in more prolonged anesthesia, are being used more extensively in the larger clinics. Ethyl chloride and other agents for a quick induction, or even for prolonged anesthesia, have their advocates. The use of oxygen in combination with the various agents for inhalation, especially nitrous oxide and ethylene, provides an anesthesia characterized by marked absence of untoward reactions. Carbon dioxide as an aid in general anesthesia has in recent years been recommended by Henderson, Haggard and Coburn,3 Lundy,8 White,15 and others. It aids in the induction of anesthesia and the elimination of ether, and is a decided aid in the administration of ethylene. It should be administered from a four-control type of machine.8

Bevan and Favill¹ in 1905 called attention to delayed chloroform poisoning, and concluded that young persons were more susceptible to this serious toxemia. MacNider¹³ has shown in his studies concerning the effects of general anesthetics on the organism as a whole that ether is more toxic for an old organism than for a young one. The margin of safety would be somewhat greater if ether were used for a prolonged operation on a child. It would be inadvisable to submit an elderly man with benign hypertrophy of the prostate and the associated infection of the bladder and, frequently,

disease of the kidney to prolonged general anesthesia, when sacral and abdominal block give satisfactory results^{4, 10}. Should the question of technic arise in administering such an anesthetic, there still remain other agents and methods. A combination of various inhalation agents might give better results with a greater degree of safety. Lundy⁶ has pointed out that balanced anesthesia should be as important a consideration as a balanced diet. A combination of a preliminary hypnotic, regional anesthetic and inhalation anesthetics results in balanced anesthesia. He concludes that whenever it can be introduced it probably comes closer to satisfying the operator, the internist, the anesthetist and the patient, than any one procedure can, if used as a routine. It is easy for anyone

Among other methods of inducing general anesthesia, rectal or colonic and intravenous induction may be mentioned. A comprehensive survey of the technic is given in Bickman's Operative Surgery. I have seen excellent results at the Mayo Clinic in operations about the face, jaw and palate from ether in olive oil injected into the rectum. This method of induction can be made reasonably safe by careful selection of cases, by slow administration, by leaving the rectal tube in place clamped with a hemostat so as to let the solution run out if needs be, and by stimulating de-etherization by means of carbon dioxide should this become necessary. Again one has the choice of administering the anesthetic by insufflation. Intravenous administration is a more recent innovation and still in its experimental stage. In the form of isopral-ether it has been carried out extensively in Germany with good reports. Connell, Burkhardt and Gwathmey have done much to systematize the technic.² It may be said that the method is hardly to be regarded as applicable to general surgical practice.2

It is difficult to classify the groups of procedures under local anesthesia. This is a specific term insofar as the point of action of the agent is concerned, but it is a very broad term when considered from the standpoint of technic. I feel that a clearer understanding of what regional anesthesia really is can perhaps be obtained by considering local analgesia, local infiltration, posterior splanchnic block and spinal anesthesia as separate and distinct procedures,

although the end results from the viewpoint of anesthesia are similar. There are numerous instances when a general anesthesia is contraindicated; there are instances when regional anesthesia is to be preferred to general anesthesia. Certainly in a large number of cases and in many specific types of operation, local anesthesia comes very near fulfilling the requirements of what might well be called an ideal anesthetic.

By the term local analgesia, I refer to the zone of anesthesia produced by the injection of such an agent as procaine into the immediate field of operation (local infiltration), or by freezing the immediate field with such an agent as ethyl chloride. These methods of inducing insensibility to pain find a large field in minor surgery. In freezing a field for operation it must be remembered that some devitalization of tissue is possible, and that careful dissection is impossible in a frozen field. Local infiltration in subtotal thyroidectomy is used by Pemberton at the Mayo Clinic in preference to cervical block. Should it become necessary for any reason, he combines light gas-oxygen anesthesia by inhalation.

The work of Babcock and others in spinal anesthesia constitutes a peak in surgery. I cannot help but fear, however, the fall in blood pressure which rather frequently occurs and is sometimes alarming. This feeling is shared by many others. It may be a question of technic, for many excellent results have been reported. Further experimentation with ephedrin may lead to a technic which will make spinal anesthesia safer and more widely used. Its possibilities are great.

Lundy states that splanchnic block is not intended to usurp the position of general anesthesia; it is regarded as an aid. In 184 cases of spanchnic anesthesia from October 14, 1924, to March 14, 1925, he showed that anesthesia was completely satisfactory in only 55 per cent of the unselected cases; in about 8 per cent it was fairly satisfactory, and in 36 per cent it had to be combined with general anesthesia because of pain, nausea and other unfavorable conditions.¹¹ From March 15, 1925, to July 1, 1925, he reported 150 cases of splanchnic anesthesia, and from July 1, 1925, to June 1, 1926, forty-five cases. In eighty-six of these it was his intention to rely on splanchnic block alone. Anesthesia was completely satisfactory in forty-four cases (about 51 per cent) and fairly satisfactory in two cases (about 2 per cent); in forty-one cases (47 per cent) it had to be combined with general anesthesia because of pain, nausea or nervousness. Progress in the field of splanchnic block awaits clearer elucidation of the mechanism of splanchnic pain. Posterior splanchnic block has been given an extensive trial at the Mayo Clinic and Lundy concludes that its use is justifiable in certain well-selected cases, or when general anesthesia is almost entirely contraindicated.

Regional Anesthesia

By the term regional anesthesia 1 refer to those nerve-blocks from the field of operation producing anesthesia in the areas supplied by the nerves blocked. I exclude spinal anesthesia and, on account of its rather formidable procedure, posterior splanchnic block. In the tabulation six cases of splanchnic block are included. They do not figure in the percentages, however, as general anesthesia was intentionally combined in all. Cases of local infiltration are included. During my three months' service in Regional Anesthesia at the Mayo Clinic in the spring of 1926, regional anesthesia was induced in 937 cases by the Section.

In the tabulation the various types of procedure are outlined in the first column. The term "intentionally combined" is applied to those cases in which it was previously decided that regional anesthesia would be used as an aid to general, in order to decrease the amount of an inhalation anesthetic and to subject the patient to a shorter period of general anesthesia. The terms "marked" or "slight" refer to the untoward reaction taking place during or immediately after the injection of 1.0 per cent or 0.5 per cent procaine solution, with or without the addition of epinephrine. (The reactions from either procaine or epinephrine are grouped together, as the prime consideration was the presence of any untoward reaction at all.) The term "satisfactory" is used to designate those cases in which the patient was carried through the operation insensible to pain and with little or no demonstrable nervousness, with or without a preliminary hypodermic of morphine. In those cases reported as "fair" the operation was attended by some untoward nervous symptoms, but with a minimal amount of pain. When the result was designated "poor" it meant that there was considerable nervousness and much pain. "Necessarily combined" means that regional anesthesia was an absolute failure, and that inhalation anesthesia had to be resorted to. These results were checked by both the operating surgeon and the anesthetist, and in most cases by the patient's own statement. The percentage figures are based on 606 cases: those of the total series in which anesthesia was not intentionally combined, and one case in which the anesthetic was injected but operation was not performed.

The operations performed were varied. They may be grouped under the different types of injections done: abdominal block was used for exploratory laparotomy, operations on the gallbladder and ducts and on the stomach and duodenum and for hernia: cervical block for subtotal thyroidectomy, block dissection of neck, dissection of the submaxillary and submental lymph nodes and glands, laryngectomy, thyrotomy and excision of cyst of the thyroglossal duct; caudal block alone for cystoscopy, punch operation for enlargement of the median bar of the prostate and dilatation of urethral strictures; field block for circumcision, Mayo operation for bunion, operations on the brain and excision of benign tumors of the breast; infiltration for simple amputation of the breast, removal of subdermal tumors and largely for minor surgical procedures; paravertebral block for operations on the kidney and laminectomy; cervical and field block for operations on the brain and subtotal thyroidectomy; transsacral block for operations on the rectum and anus, posterior resection of the rectum, operations about the vagina and perineum and cystoscopy in some cases; caudal block and injection of one or two pairs of foramina for hemorrhoidectomy and operations on and about the rectum and anus; sacral and abdominal block for operations in the urinary bladder, as prostatectomy, cystostomy, resection of diverticula and tumors of the bladder and diathermy.

Discussion

For certain operations I believe that regional anesthesia does approach the ideal. Lundy¹⁰ has reported 525 cases of suprapubic prostatectomy performed for the most part under sacral and abdominal block, with good results in 87.1

per cent, fair results in 7.8 per cent, poor results in only 1.5 per cent and necessary combination of anesthesia in 3.4 per cent. In 91.9 per cent no untoward reaction occurred. For cystostomy his results approximate those for prostatectomy. In 101 cases of cystostomy, including cases of fulguration of the bladder, litholopaxy, punch operation, removal of ureteral stones and dilatation of urethral strictures. results were good in 96 per cent. His results in the total of 1023 cases of operations in the urinary bladder were: good in 85.7 per cent, fair in 8.3 per cent, and poor in 2.1 per cent; anesthesia was a failure in 3.8 per cent. These figures compare favorably with those in the tabulation under sacral and abdominal block. They show the uniformity of results that can be obtained, as the eighty-five cases listed under sacral and abdominal block were practically all operations in the urinary bladder and are included in the entire series reported by Lundy covering a period of twenty-seven months.

In eighty-nine cases listed in the tabulation, caudal block and injection of one or two pairs of sacral foramina were carried out in practically all for hemorrhoidectomy or operations on the anus for fissure and fistula, or for dilatation of anal strictures. Over 98 per cent were completely satisfactory. In a much larger series of cases of hemorrhoidectomy, Lundy and McCuskey have reported 95 per cent completely satisfactory and only one a failure. In posterior resection of the rectum better results are obtained from regional anesthesia when the growth is low than when it is high.¹² The reason for this is, of course, the distribution of the sacral nerves.

In cases of abdominal section, anesthesia is not satisfactory in as high a percentage as in other types of operation. It will be seen that in 69.4 per cent of the cases anesthesia was intentionally combined, and in 9.7 per cent it was a complete failure. Of the 113 cases in which anesthesia was not intentionally combined it was satisfactory in only 74.3 per cent, fair in 13.2 per cent and poor in 2.6 per cent. As our knowledge of the innervation of the abdomen and its contents and the alteration of nervous stimuli by pathologic processes improves, undoubtedly there will be an increase in the satisfactory percentages.

Infiltration usually gives good results, as does

field block. They can readily be reinforced during the operation if necessary.

It should be particularly noted that of the 937 cases, anesthesia was intentionally or necessarily combined in 361. In only thirty-nine cases was anesthesia reported as fair and in six cases as poor. Perhaps a large number of the cases of combined anesthesia, especially those intentionally combined, would have been carried through operation under regional anesthesia and reported as fair. The purpose of inducing regional anesthesia is not to compel a nervous patient, or one who is difficult to anesthetize, to undergo an operation suffering mentally or physically. There should not be the least hesitation in combining a general anesthetic by using ethylene, nitrous oxide or ether in such a case. Such a combination does not detract from the efficacy of the procaine or the technic of administration. Preliminary hypnotics of morphine or codeine in moderate doses are advisable in most cases. The anesthesia may be supplemented by further injections of local anesthetics. Because it may be advisable to reinforce the local anesthesia by any of these means, it is not justifiable to classify the local

procedure as poor. It must be remembered that the one suffering is the patient, not the operator or the anesthetist.

There are certain conditions that render combined or balanced anesthesia advisable. In cases of gastric carcinoma and ulcer of the stomach or duodenum, particularly those associated with obstruction and consequent debility, malnutrition and toxicity, the abdomen can be opened and closed under local anesthesia, and the resection, pyloroplasty or gastroenterostomy carried out under light ethyleneoxygen inhalation anesthesia. It is gratifying to see the smooth anesthesia and remarkable absence of untoward after-effects following such a procedure. For very nervous patients combined anesthesia is required, and not infrequently it is advisable to induce only general anesthesia. Climatic and racial factors play an important part: patients from the warmer climates show a higher percentage of unsatisfactory results; Hebrews are notoriously poor prospects, as are, interestingly enough, redhaired persons.

Reactions from the procaine or epinephrine can be reduced to a low minimum by deliberate,

TABULATION

Regional anesthesia induced at the Mayo Clinic during April, May, and June, 1926, in 937 cases.

	Total untoward reactions			ly combined tions not per-			Satis- factory			Fair		Neces- sarily combined		Poor				
	Cases	Marked	Per Cent	Slight	Per Cent	Cases	Per Cent	Case	Per Cent pam	Remainder Cases	Cases	Per Cent	Cases	Per Cent	Cases	Per Cent	Cases	Per Cent
Abdominal	373			3		259	69.4	1	0.2	113	84			13.2		9.7	3	2.6
Cervical	52			1	1.9		21.1			41	34	82.9	5	12.1	2	4.8		1
Caudal	20				5.0		5.0			19	18		1					
Field block	59	i		1	1.6		13.5			51	44		2	3.9		7.8	1	1.9
Infiltrations	46					11	23.9			35	32			j	3	8.5		
Paravertebral	10		l			8	80.0			2	2	100.0	_					1.
Transsacral	165	4	2.4	2	1.2	1 .	12.1				133		5	3.4	6	4.1	1	0.6
Foramina only	2					1	50.0			1		100.0		l				
Caudal and abdominal	8									8		100.0						
Cervical and field block	13	į		2	1.3	3	23.0		3	10	8	80.0	1	10.0	1	10.0		
Caudal and 1 pair			1 0				- 0				0.0	0 = 1						
foramina	72	1	1.3	2	2.7	1	1.3			71	69	97.1	2	2.8				
Caudal and 2 pair	1.7				- 0					1.71	1.7	7000						
foramina Caudal and 1 foramen	17				5.8					17		$100.0 \\ 100.0$						
Caudal and 1 foramen Caudal and 1 pair fora-	0			1	3.3					5	0	100.0	i		1			
mina and field block	1			ļ						1			}		1	100.0		1
Caudal 1 pair foramina	1									1					1	100.0		-
and abdominal	4	1							}	4	A	100.0						
Sacral and abdominal	85	3	3.5	4	4.7	1	1.1			84	72		8	9.5	3	3.5	1	1.1
Sacral and field block	1	0	0.0	-	2.1	1	1.1			1		100.0	0	3.3	3	0.0	1	1.1
Paravertebral and	1		1							1	-	100.0						
splanchnic	6		1			6	100.0											
Totals	937*	8	0.8	18	1.9		35.2	1	0.1	16061	530	87.4	139	6.4	31	5 1	6	10.9

^{* 120} cases injected by the author.

unhurried technic. This has been accomplished at the Mayo Clinic where the total untoward reactions were reduced from the high figure of 20 per cent to the low one of 2 per cent.9

Conclusions

In regional anesthesia, combined if necessary with inhalation anesthesia, the surgeon is provided with a procedure which does approach the ideal, in that in the large majority of cases (1) it renders the patient insensible to pain, (2) it can be comfortably induced, (3) it affords relaxation (4) it has minimal toxicity, (5) it is safe during surgical anesthesia, and (6) the untoward after-effects so common with the inhalation agents, particularly ether, are practically eliminated. Especially is this true in operations in the urinary bladder and rectum and anus, those areas supplied by the sacral nerves. In those cases in which prolonged general anesthesia might be dangerous, combined anesthesia is very satisfactory.

Failure of regional anesthesia is not necessarily due to the agent itself. There are individuals who do not respond to it. Perhaps the greatest cause of failure is poor technic, especially hurried technic. In the hands of experienced and trained anesthetists it has proved highly satisfactory to the operator, the internist, the anesthetist and, most of all, to the patient. As a rule regional anesthesia is not difficult to induce, and it should be used more frequently.

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EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

The Eye, Ear, Nose and Thoat Monthly, February, 1928

Caustic Burns of the Eye—Dr. Sherwin Livingston Haseltine

The object of this paper is to direct the attention of the profession to the dangers of eaustic burns of the eye, and to emphasize the value and use of ammonium chloride as a remedy.

Our work with causties, such as lye or caustie soda, sodium sulphide, etc., have shown by experiments that they have an affinity for horny tissues such as hair, skin, nails and cornea of the cyes. Inasmuch as in this article we are dealing only with the eye, the other parts will be omitted and consider merely the cornea and conjunctiva.

Causties burn the parts instantly. The conjunctiva will show a whitish or grayish color within a few hours while the cornea may not look badly burnt for three or four days and remain clear, then suddenly it turns gray and within one or two days thereafter the whole burnt area will slough and nothing can stop it, as this is dead tissue due to the eaustie action.

It is well to give a guarded prognosis in these burns, as it eannot be told for some time how much destruction has taken place. The conjunctiva by clinical experiment is more resistant to caustics than the cornea, hence it does not burn as deeply nor as fast. As I stated before, caustics burn instantly, so unless the irritant is neutralized at once there will be more or less loss of tissue. These chemicals penetrate into the structures apparently leaving a layer of coagulated albumin, which prevents acids, used for neutralization from reaching them.

In two of the cases I have had the patients lost their vision and the whole eornea sloughed, gausing a panophthalmitis. In another ease the lower portion of the cornea was burned and a large leucoma resulted from the great loss of tissue.

Chinically and experimentally we have found ammonium chloride is the substance best to neutralize eaustics, as shown by the following reactions:

2NH4CL 1NaS=(NH4)2S 12NaCL NH4CL 1 NaO2H=NaCL 1 NH4OH and 2NH4CL 1 Ca(OH)2=CaCL2 1 NH4 OH.

None of these resulting ehemicals are injurious to the eye in dilute form.

By neutralizing caustics with hydrochloric acid there is produced, according to Nostrand's Chemical Analysis, 13,780 calories of heat; acetic acid produces 13,400 calories of heat in its neutralization. Since acids generate heat in neutralizing caustics and they do not penetrate the coagulated albumin fast enough to get to the caustic irritant, they are not good neutralizing agents. Ammonium chloride apparently penetrates this coat of albumin and does not produce any perceptible heat in its reaction, both reagents being salts.

Since the use of the 1 per cent solution we have had about thirty-five eases of caustic burns of the eye and none proving serious, owing to the immediate instillation of this solution.

In conclusion, I should say, in view of the above shown facts, it is advisable to give a guarded prognosis in caustic burns, and use ammonium chloride in a 1 per cent solution, putting one drop in the eyes every fifteen minutes for two hours, then every hour for four hours, following this by one drop every two hours for two or three days.

In Charleston we see quite a number of caustic burns of the eye, mostly in the colored race. One seen within the past week was of a white man.

WOMAN'S AUXILIARY

South Carolina Medical Association

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CONVENTION CALL OF THE WOMAN'S AUXILIARY TO THE S. C. MEDICAL ASSOCIATION

My dear Auxiliary Members:

It is my happy privilege for the second time to call your attention to our annual State Convention, which meets at Columbia, Wednesday, April 18th.

A fine program has been arranged. Eminent speakers will address the Convention and inspiring music will be rendered by Columbia's best musicians.

There will be delightful social affairs given by the hospitable hostess Auxiliary.

Each Auxiliary is expected to send three delegates (including president). Elect them at once, and send names to Mrs. Garden Stuart of East-over, President of Richland County Auxiliary.

The morning session begins at 10 o'clock. The afternoon session at 2:30 o'clock.

Don't fail to have your Auxiliary represented. Come and do your part to make our Convention a grand success!

Cordially yours,
Daisy Lee Stuckey,
President Woman's Auxiliary
S. C. Med. Assn.

Columbia, S. C., January 28, 1928.

Mrs. H. M. Stuckey,

President S. C. Medical Auxiliary,

Sumter, S. C.

My dear Mrs. Stucky: I have your very kind letter of January 25th, and also the enclosure with reference to Doctor Marion Sims, and the proposed bill providing for a Memorial Fund, and I shall read with much interest. Doctor Sims was a great physician and anything that might be done to honor his memory would most cer-

tainly be gratifying to me. If this bill becomes law, or any other law should be enacted providing for the funds from which this memorial could be realized you may be sure that I shall give it my careful consideration.

With best wishes, I am,

Cordially yours,

John G. Richards, Governor.

SIMS MEMORIAL ACT

"Section 1. That a committee be and is hereby appointed consisting of the officers of the Auxiliary of the State Medical Association, and of three members of the State Medical Association to be appointed by the President of the Association and it shall be the duty of said committee to raise funds by public subscription for the erection of this Memorial, and when funds thus raised have exceeded the sum of Two Thousand, Five Hundred (\$2,500.00) Dollars there is hereby made available out of the funds now held by the State Treasurer for this purpose, an amount equal to that raised by public subscription, Provided, That the appropriation on the part of the State shall not exceed Five Thousand (\$5,000.00) Dollars, it being the purpose of this Act that the State shall not participate in an amount less than Twentyfive Hundred (\$2,500.00) Dollars, nor over Five Thousand (\$5,000.00) Dollars."

"Section 2. Upon certification to the State Treasurer of the fact that a sum of Two Thousand Five Hundred (\$2,500.00) Dollars, or in excess thereof has been subscribed to the said committee, the State Treasurer shall pay out on warrant of the said committee an amount equal to that so subscribed, up to the sum of Five Thousand (\$5,000.00) Dollars, for the purpose of erecting a suitable Memorial to the memory of Dr. J. Marion Sims and said Memorial shall be erected by the said committee on the State House Grounds, in Columbia, suitably inscribed."

Sumter, S. C., February 24, 1928.

Mrs. H. M. Stuckey,

Sumter, S. C.

Dear Mrs. Stuckey: The Memorial Bill in which you are interested has been ratified, and now requires only the signature of the Governor to become law. The commission appointed to erect the Sims Memorial will under the terms of the bill, consist of three members to be appointed by the President of the Medical Association of the State to act with the officers of the Auxiliary. The only other change made is that the State will match any fund you may raise, up to, but not exceeding the sum of \$5,000.00. In other words, if you raise \$5,000.00, then you can erect a memorial costing not in excess of \$10,000.00.

I was very glad to be of service in this most worthy cause.

Very sincerely,

S. H. Nash.

HONOR DOCTOR SIMS

"Kentucky members of the Auxiliary will be interested to know that the Woman's Auxiliary to the S. C. Medical Association has already raised \$2,700 toward a fund of \$5,000 for the purpose of erecting a monument to Dr. James Marion Sims, the famous surgeon of South Carolina.

The President of S. C. Auxiliary is Mrs. H. M. Stuckey of Sumter, who married a prominent physician of South Carolina, twenty-five years ago, and moved from Kentucky, her native state.

Before her marriage, Mrs. Stuckey was Miss Daisy Lee Hutcheson, daughter of Senator and Mrs. T. M. Hutcheson, of Henderson, Ky.

All Kentuckians will join in hearty congratulations and good wishes for success in this excellent work of Mrs. Stuckey, and our other Auxiliary friends in South Carolina."

Kentucky Medical Journal (February).

The Woman's Auxiliary of the Ridge Medical Association met at the residence of Mrs. Dr. W. T. Gibson, February 20, 1928, 8 P. M. The President called for order and asked that the meeting be opened with "Salute to Our Flag."

After this there was a short business meeting held.

A report made on Sims Memorial Fund stated that one hundred and thirty-five dollars had been collected through the efforts of the Auxiliary. The members voted unanimously that the monument be placed on the State House Grounds.

It was decided that the members send flowers or sympathy cards to the sick when an opportunity presented itself.

Mrs. A. L. Ballenger read very interestingly of "Pasteur" and his wonderful scientific works. A general discussion followed and at the close of the program, each felt that she had been benefitted by having learned something of Pasteur and his contribution to the world.

Mrs. Gibson served delicious refreshments and the meeting adjourned.

The Sumter County Medical Auxiliary met on March 12th, at the home of Mrs. C. J. Lemmon. The meeting was called to order by the President, Mrs. J. R. Dunn and the Lord's Prayer was repeated in unison. Mrs. T. R. Littlejohn read an interesting article about Dr. James Jackson. Mrs. J. H. Miller and Mrs. D. O. Winter were elected as delegates, with Mrs. W. E. Mills and Mrs. T. R. Littlejohn as alternates to the State Medical Auxiliary to be held in Columbia in April.

After the business meeting Mrs. C. J. Lemmon served a delicious sweet course.

Mrs. D. O. Winter, Publicity Chairman.

Columbia, S. C., March 17, 1928.

The Woman's Auxiliary to the Medical

Association.

Dear Auxiliary Members: Dr. M. H. Wyman, Entertainment Chairman of the Medical Association, has asked me to write you a letter, giving the feature points of our entertainment for you, so that many will accept our earnest invitation and come to the convention in April. The convention begins on Tuesday, April 17th, Dr. and Mrs. James Hayne of Congaree are entertaining the public health delegates with a barbecue and have invited all here on Tuesday afternoon to be their guests. Congaree is fifteen miles from Columbia just off the paved road and offers a lovely drive. The barbecue itself needs no mention other than Dr. and Mrs. Hayne are giving it.

On Wednesday morning, Mrs. William Weston, Chairman of the Registration Committee, will be at the Jefferson Hotel to welcome all doctor's wives and give them any needed information.

Mrs. Marion Wyman, Chairman of the Motor Corps with her Committee will be at the Jefferson Hotel to drive all delegates or visitors to Trinity Parish House where the sessions will begin at ten o'clock.

At one thirty we will serve a luncheon to the delegates and we wish to invite every visiting doctor's wife to be present at this luncheon.

Dr. Wyman has arranged the entertainment for Wednesday evening.

All visitors are invited to go for a drive on Thursday morning and at twelve o'clock to attend a tea at the home of Mrs. Julius Taylor.

Trusting that we will have a record attendance.
Yours truly,

Eugenia Salley Gibbes.

EXPLANATION

A request from The Ridge Auxiliary desires the publication of names of individuals and clubs who contributed the \$125.00 sent to the treasurer in the name of "The Ridge Auxiliary," and so listed in the January publication of Sims' Memorial funds. The itemized contribution, as sent with request, appears below.

Other Auxiliaries who have sent collections

without names, and who now desire to publish such names, may do so by sending type-written lists to the treasurer.

It must be understood that lists not in the regular column mean no further collections, but merely itemize certain contributions already published—which contributions were in every case recorded in exact accordance with the information sent with check.

Mary K. Boyd,

Treasurer Sims' Memorial Fund.

Contributions confected for Sims Men	noriai
through the Ridge Medical Auxiliary:	
Dr. and Mrs. F. G. Asbill, Ridge Spring\$	5.00
Dr. and Mrs. D. B. Frontis, Ridge Spring _	5.00
Dr. and Mrs. P. A. Brunson, Ridge Spring	5.00
Dr. and Mrs. O. P. Wise, Saluda, S. C.	5.00
Dr. and Mrs. S. M. Pitts, Saluda	5.00
Dr. and Mrs. J. D. Waters, Saluda	5.00
Dr. and Mrs. D. M. Crosson, Leesville	5.00
Dr. Jas. Crosson, Leesville	3.00
Dr. J. S. Black, Leesville	3.00
Dr. and Mrs. W. H. Shealy, Leesville	5.00
Leesville Woman's Club	5.00
Dr. and Mrs. L. C. Brooker, Swansea	5.00
Dr. and Mrs. J. G. Edwards, Edgefield	5.00
Dr. J. G. Tompkins, Edgefield	5.00
Dr. and Mrs. J. N. Crafton, Edgefield	5.00
Batesburg Woman's Club, Batesburg	10.00
Batesburg W. C. T. U.	5.00
Dr. and Mrs. A. L. Ballenger, Batesburg	5.00
Dr. and Mrs. W. T. Gibson, Batesburg	5.00
Dr. and Mrs. W. P. Timmerman, Batesburg	5.00
Dr. and Mrs. J. H. Mathias, Lexington	5.00
New Century Club, Johnston	2.00
Apollo Music Club, Johnston	2.00

CONTRIBUTIONS TO SIMS' MEMORIAL

\$125.00

Previously published\$2,5	570.08
Nurses Alumnae Assn., Toumey Hosp.,	
Sumter	10.00

Afternoon Music Club, Columbia	5.00
Dr. S. R. Lucas	2.50
Dr. W. R. Mead	5.00
Dr. E. M. Hicks	2.50
Dr. P. D. Hay	5.00
Dr. W. H. Poston	2.50
Dr. James McLeod	5.00
Dr. E. A. Simmons	2.50
Dr. O. T. Finklea	5.00
Dr. M. R. Mosley	2.50
Dr. F. D. Kelly	2.50
U. D. C. Chapter, Batesburg	5.00
Rock Hill Med. Auxiliary	5.00
Columbia Art. Association	5.00

Total contributions March 14, 1928____\$2,635.08
Since the February publication I have been informed that an Auxiliary carried on the Secretary's and Treasurer's books as "York County Auxiliary" is called instead "Rock Hill Auxiliary."
Contributions listed heretofore from "York County Auxiliary" were sent by "Rock Hill Auxiliary."

Mary K. Boyd,

Treasurer Sims' Memorial Fund.

CONTRIBUTORS TO SIMS' MEMORIAL FUND FROM CHARLESTON

Marion Sims Memorial, Dr. C. W. Kollock, Treas; Doctors Edward F. Parker, M. W. Beach, Ernest Baynard, M. S. Moore, Cyril O'Driscoll, J. Sumter Rhame, J. J. Ravenel, Price, Wm. Gamble, Jr., Wythe Rhett, G. McF. Mood, Kenneth Lynch, J. A. Finger, Henry de Saussure, W. L. Wild, T. E. Bowers, Ripon Wilson, Edward Rutledge, H. P. Jackson, Sedgwick Simons, W. H. Johnson, Frank Johnson, W. F. R. Phillips, W. J. Pettus, L. Wilson, O. B. Chamberlain, R. S. Cathcart, F. Cain, A. J. Buist, J. W. Burn, Joe Waring, Robert Wilson, A. E. Baker, A. E. Baker, Jr., B. R. Baker, W. Atmar Smith, F. Parker, Pierre Jenkins, Gus Richards, H. P. Wagner, of Rochester, Minn.; Austin Ball, Lean Banov: The Woman's Auxiliary, The Marion Sims' Junior Medical Society. Total contributions, \$340.78.

SOCIETY REPORTS

SPARTANBURG COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Spartanburg County Medical Society was held at the Spartanburg General Hospital, Friday, February 24th, at 8 P. M.

There were thirty-five doctors present at this meeting.

A letter was read from the Secretary to Hon. Cole L. Blease and Hon. E. D. Smith requesting them to support the bill allowing physicians to deduct from their Income Tax expenses incurred by attending clinics and medical meetings. Senator Blease replied that it would receive his earnest consideration. Senator Smith stated he favored the bill and would support it. A letter was read from Mrs. Frasier James, Executive Secretary of the Spartanburg County Tuberculosis Association, requesting the Medical Society's cooperation in their Early Diagnosis Campaign. Dr. D. L. Smith moved that the Society endorse this campaign. This was seconded by Dr. Fike and carried. The President appointed Drs. Heinitsh, Sanders, and Boyd a committee to meet with Mrs. James and help in planning this campaign.

Dr. D. Lesesne Smith then introduced the invited guest and speaker of the evening, Dr. Kenneth M. Lynch, Professor of Pathology in the South Carolina Medical College. Dr. Lynch gave an instructive and impressive address in which he stressed the importance of post mortem examinations, not only as a means of instructing medical undergraduates but as the sine qua non of intelligent diagnosis and therapeutics. autopsy, so common in all European countries is relatively rare in the United States, and when performed is often incomplete. Dr. Lynch stated that he believes that the hospitals of the future will be graded partially on the percentage of autopsies performed, and that in spite of much brilliant research work there will be no decided improvement in medical practice until autopsies are performed in the majority of our hospitals. He spoke enthusiastically of the clinico-pathological conference as held at the Roper Hospital.

At the conclusion of this address such a conference was held with Dr. Lynch presiding. Post Mortem specimens from two cases were presented.

The first, an infant nine months old who died rather suddenly with symptoms of asphyxiation. The clinical aspect of this case was presented by Dr. Lesesne Smith and discussed by several memthen given by Dr. Lynch: the cause of death bebers of the Society. The pathological report was

ing a very much enlarged thymus which compressed the trachea and primary bronchi.

The second case was a colored man 56 years old who died following a rather prolonged illness. The striking features were urinary retention, edema, and coma. Dr. F. H. Sanders presented and discussed the clinical aspects of this case. Dr. Allen Jervey of Tryon, Dr. George Wilkinson and Dr. Wm. Buck Sparkman of Greenville also joined in this discussion.

Dr. Lynch then gave the pathological report: Prostatic hypertrophy, chronic interstitial nephritis, arteriosclerosis.

There being no other business the meeting was adjourned.

O. C. Bennett, President, R. P. Finney, Acting Secretary.

MINUTES OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CARO-LINA, HELD AT ROPER HOSPITAL, TUES-DAY EVENING, MARCH 13, 1928, AT 8:30 P. M.

The meeting was called to order by the President, Dr. Harry P. Jackson.

Present: Doctors Allen, A. E. Baker, B. R. Baker, Ball, Banov, Beach, Beckman, Buist, Burn, Byrnes, Cain, Cannon, Cathcart, Chamberlain, Frampton, W. H. Finger, Gamble, Heidt, Jackson, F. B. Johnson, W. H. Johnson, Kollock, La-Roche, Lynch, McCrady, Maguire, Martin, Mitchell, Moore, Hood, O'Driscoll, F. L. Parker, Pearlstine, Plowden, Ravenel, Rhame, W. M. Rhett, Rutledge, Sanders, Scott, Speissegger, Townsend, Waring, I. R. Wilson, L. A. Wilson, R. Wilson, Prioleau. (47).

Guests: Dr. D. Lesesne Smith, Dr. E. A. Hines, Dr. M. H. Wyman, Hospital Internes and Medical Students.

The minutes of the meeting of February 28th were read and confirmed.

Under the head of unfinished business, it was moved, seconded and carried that the report on expert medical testimony be read in its entirety.

Dr. Lynch read the report, and then it was moved, seconded and carried that the report be read and discussed by sections.

The Secretary read Section 1, and Dr. Cathcart moved that Section 1 be adopted as read. Seconded. Discussed by Dr. I. R. Wilson, and Dr. Chamberlain. The section was adopted as read.

Section 2 was read and it was moved, seconded that it be adopted. Section 2 was adopted as read.

Section 3 was adopted as read.

Section 4 was read and discussed and adopted as read.

Section 5 was read and discussed and adopted as read.

Section 6 was read and discussed and adopted as read.

The Resolution at the end of the Report—that the President of the Society appoint a committee of three to review and report upon expert medical testimony—was discussed by Dr. W. H. Johnson. The discussion was discontinued now, as it was nine o'clock, and the Scientific Program was called.

Dr. D. Lesesne Smith, President of the South Carolina Medical Association, then addressed the Society. His subject was "The Upper Respiratory Infections in Children." He read a most interesting paper, in which he pointed out that this disease seemed to be on the increase. He stated that this condition occurs in waves all through the year, some cases running on to serious complications, such as throat infections, grippe, laryngitis, etc., and that no specific germ seemed to be the etiological factor. May be a different organism in different infections. In a large percentage of the cases, even when throat symptoms were mild, there was an involvement of the middle ear.

He called attention, too, to the frequency of abdominal pain in throat infections, which are often confused with appendicitis. Be sure to examine the middle ear.

After concluding his paper Dr. Smith made a few remarks on the coming meeting of the State Association in Columbia; and he also made favorable comments on the Post-Graduate Course of the Medical College.

Dr. Smith's paper was discussed by Drs. Wythe Rhett, Beach, Banov, and Mood, Dr. Smith closing.

The Secretary of the State Association, Dr. Edgar A. Hines, then addressed the Society. He spoke in the highest terms of the various organizations in the State connected with the profession such as the State Hospital Association, the Society for Mental Hygiene, and the other allied organizations.

He also spoke in the highest terms of the Medical College Post-Graduate Course, and described it as the major consummation of the State program for the year.

After Dr. Hines, Dr. Marion H. Wyman, Chairman of the Committee on Arrangements, spoke. He discussed the program, and the clinics, and the plans for entertainment that would be carried out at the coming meeting in Columbia.

The Society then reverted to the order of business, and completed the discussion of the special Report on Expert Medical Testimony.

The last resolution of the report was further

discussed, and was adopted as read by the Secretary.

Dr. Cathcart then moved the adoption of the Report as a whole. Seconded and carried.

Dr. Cathcart moved that the delegates of the Society to the State Association be instructed to present the bill at the State Association meeting. Seconded and carried.

Under miscellaneous business a letter from the South Carolina Society for Mental Hygiene was read. This was received as information.

Under the head of Reports of Officers and Committees, Dr. James J. Ravenel, Chairman of the Committee, presented resolutions on the death of Dr. Ernest C. Baynard. It was moved, seconded, and carried that the resolutions be adopted by a standing vote.

There being no further business, the Society adjourned to partake of a Buffet Supper.

Approved:

W. Atmar Smith, M. D., Secretary.

REGULAR MEETING BEAUFORT-JASPER MEDICAL SOCIETY

March 2nd regular meeting Beaufort-Jasper Medical Society was held at the home of Dr. M. G. Elliott in Beaufort.

Besides the regular members the following visitors were present: Councillor J. H. Cannon, Dr. F. B. Johnson, Dr. R. L. McCrady and Dr. H. H. Plowden of Charleston, Capt. R. E. Stoops, Chas. Duhigg, Humphries and Miller of Parris Island Marine Station.

Reading of minutes was omitted and Dr. Cannon read a very instructive paper on Coronary Thrombosis. Discussed by Drs. Foster Stoop and Elliott.

Dr. McCrady read a paper on Ectopic Pregnency, Discussed by Dr. Humphries.

Dr. F. B. Johnson talked on Sedimentation Test in Septic Conditions, describing in detail. Discussed by Dr. Stoops.

Refreshments were delightfully served by Mrs. Elliott assisted by Mrs. Dr. Foster and Miss Dollie Elliott.

Dr. C. E. Smith read a paper on Pellagra, discussed by all present.

H. B. Senn, M. D., Secretary.

MINUTES OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CARO-LINA, HELD AT ROPER HOSPITAL, TUES-DAY EVENING, FEBRUARY 28, 1928, AT 8:30 P. M.

The meeting was called to order by the President, Dr. Harry P. Jackson.

Present: Doctors Allen, A. E. Baker, Banov, Beach, Beckman, Bowers, Buist, Burn, Cannon, Cathcart, de Saussure, Chamberlain, Deas, W. H. Frampton, Finger, Gamble, Jackson, F. B. John-

son, W. H. Johnson, Kollock, LaRoche, Lynch, G. F. McInnes, McCrady, Maguire, Martin, Mitchell, Mood, O'Driscoll, E. F. Parker, F. L. Parker, Pearlstine, Phillips, Plowden, F. R. Price, Richards, W. P. Rhett, Rutledge, Sanders, J. E. Smith, W. A. Smith, C. A. Speissegger, Taft, Townsend, Waring, Wild, R. Wilson, Prioleau. (48).

Guests: Dr. J. W. Jervey, Greenville, S. C.; Dr. Laning, U. S. Navy; Dr. C. B. Colson and Dr. J. S. Smith, of Charleston.

Minutes of meeting of February 14th were read and confirmed.

The Secretary read a letter from Dr. C. P. Loranz, Secretary-Manager of the Southern Medical Association, setting forth the fact that his Association had appointed a committee to work out some plan for obtaining foreign medical lecturers to visit the Southern states, and offering this Society an opportunity to participate in these courses of lectures. A form letter from Dr. Roberts, setting forth the details of this plan, was also read. It was moved that the Secretary communicate with the Southern Medical Association and explain that this Society could not participate at the present time, as the program for the current fiscal year had already been arranged, but explain also that the Society was interested in the project, and would give it some consideration for next year; that this matter be referred to the Program Committee for consideration next year. Seconded. Carried.

The Secretary read a letter from Parke, Davis & Company, in which this company offered to show a motion picture entitled "How Biologicals are Made." It was moved, seconded and carried that the Secretary thank Parke, Davis and Company for this offer, and explain to them that as our program was full, it would be impossible for the Society to accept their kind offer, but that the members would avail themselves of the opportunity to see this film when it is shown to the students of the Medical College.

The Secretary read a letter from the Dayton Chamber of Commerce in which the attention of the Society was drawn to the Oddie Bill, which is now pending in Congress, which, if passed, will eliminate the purchase of stamped envelopes from the Post Office Department. It was moved, seconded, and carried, that this letter be referred to the Committee on Public Health and Legislation.

The Secretary stated that he had frequent letters requesting copies of the constitution and by-laws of this Society, from members, and also from outside sources, and he felt that it would be a good thing to have two or three hundred copies printed in book form, in order that each member of the Society be furnished with one, and to supply the demand for them. It was moved, seconded, and carried that the Secretary be authorized to have copies of the constitution

and by-laws made for the purposes outlined, provided it could be financed.

The Secretary brought to the attention of the Society, at the request of the Executive Secretary of the Charleston County Tuberculosis Association, the fact that the week of March 5-10th had been set aside for the Early Diagnosis Campaign by the National Tuberculosis Association, for defining early cases of this disease. She requests that the members keep a record of the number of cases which come to them for examination, in order that the value of the campaign might be known. The local Tuberculosis Association will hold clinics on Monday evening, and Tuesday and Thursday afternoons during this week, at the Health Centre for the examination of people who are unable to pay their own physicians to do this. It was moved, seconded and carried that this announcement be received as information.

The President stated that it was his sad duty to announce the death of another valued member of this Society, Dr. Eugene Luther Jagar. It was moved, seconded and carried that a committee be appointed from this Society to draw up resolutions on the death of Dr. Jagar. The President appointed the following committee: Robert Wilson, O. B. Chamberlain, and R. B. Gantt.

Dr. William H. Prioleau was present and signed the constitution, after which, when called upon, he expressed his appreciation on being accepted as a member of this Society.

At 9:00 P. M., the Scientific Program was called.

The President requested Dr. E. F. Parker to introduce the essayist of the evening, Dr. J. Wilkie Jervey, of Greenville, S. C. Dr. Parker presented the essayist in an appropriate manner. Dr. Jervey expressed pleasure in returning to his native city, and stated that he joined the Society thirty years ago, and has framed on his office wall a certificate of membership which was given to him at that time. Dr. Jervey then read an able paper on "The Paranasal Sinuses Generally Speaking." This was discussed by Drs. Parker, Kollock, Townsend and Smith.

Under Case Reports, Dr. J. E. Smith reported four cases of glandular fever complicated by suppuration, and pointing into the pharynx, with a mortality of 50%. This was discussed by Drs. J. W. Jervey, Parker, Townsend, Buist, Maguire and Phillips, Dr. Smith closing.

Dr. Henry Deas reported a case of gangrene of the leg, in which he had used, with the assistance of Dr. Taft, lipiodol for visualization of the blood vessels of the extremity. Dr. Taft showed the X-ray picture of the leg, and discussed the procedure. The case report was discussed by Drs. Maguire, Gamble, Dr. Deas and Dr. Taft closing.

Dr. W. Atmar Smith, Secretary.

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SOCIE-TY, HELD IN THE DIRECTORS' ROOM OF THE CHAMBER OF COMMERCE, MONDAY, MARCH 5, 1928.

The meeting was called to order at 8:00 P. M. by the President, Dr. P. Joseph Johnston with about forty members present.

With the consent of the Society the minutes of the last meeting were not read owing to the crowded program.

Reports of clinical cases were postponed until after the scientific program.

The President then called upon Drs. H. D. Wolfe and Hugh Smith to give short talks on the early diagnosis of tuberculosis as this had been requested by the Hopewell Tuberculosis Association in observance of the Early Diagnosis Campaign of the National Tuberculosis Association. Dr. Smith first made a few introductory remarks and gave the reports of local white and colored clinics for the year 1927. A very interesting film "The Doctor Decides" was then shown. Following the showing of the film, Dr. Wolfe made a few remarks pertaining to the physician's responsibility, and cited several cases which had occurred in his practice.

Dr. Wolfe then discussed the City License fees for physicians in Greenville, objecting to being rated with lawyers so far as these fees are concerned. He stated that osteopaths were placed on a different scale, and further stated that there was no local licensure of chiropractors. There is no city license in the cities of Georgia and North Carolina; however, Virginia cities are on the same license basis as the cities of South Carolina. Dr. Wolfe further mentioned that the license fces of the other cities of this State are all lower than the City of Greenville. He then requested the members of the Society to give their views on this matter. Discussed by Drs. W. B. Simmons, Ariail, J. W. White, C. B. Earle, J. M. Fewell, Hugh Smith, W. S. Fewell, Bruce, and Tyler.

Dr. Tyler moved that a committee be appointed to investigate Dr. Wolfe's plan and report back at the next meeting; seconded and carried. President Johnston appointed Drs. Wolfe, C. B. Earle, and Hearin to serve on this committee.

The President then called upon Dr. T. M. Davis who gave us a very able talk on the Stearns' Resectoscope. Dr. Davis' talk was appropriately illustrated with lantern slides which showed the construction of the instrument in great detail, also some before and after views of operations on the prostate gland in which this promising instrument was used.

Dr. L. H. McCalla was the next essayist and presented a well-written and informing paper on "Cholecystitis." Dr. McCalla first gave the ana-

tomy, embryology and physiology of the gallbladder in great detail. A severe or longstanding gall-bladder infection seems to damage that organ permanently, and the source of infection is by three routes namely, through the medium of the blood, through the common bile-duct and through the wall of the hollow viscus itself. There are certain cardio-vascular diseases associated with cholecystitis that cler up with cholecystectomy. Dr. McCalla then enumerated the symptoms of cholecystitis and stated the importance of using phenoltetrabromphthalein and x-ray in the diagnosis of gall-bladder disease. Our essayist then stated that cholecystectomy is not apt to clear up a patient's symptoms unless the symptoms of gall-bladder infection are classical. Following cholecystotomy it is usually necessary to resort to cholecystectomy before the patient gets complete relief. Dr. McCalla emphasized conservative surgery of the gall-bladder. Two or three clinical cases of his series which were very interesting were then presented. Discussed by Drs. W. S. Fewell, Hugh Smith and C. B. Earle; closed by Dr. McCalla.

Dr. Tyler then read a letter from Dr. F. W. Griffith of Asheville regarding the claims made by Evangelist Erickson while in Asheville as to faith healing, and requested the Society to take action regarding this matter in Greenville. Discussed by Drs. Davis, and C. O. Bates, Dr. Davis moved that no publicity be given this matter for the present fearing that more people might consult Mr. Erickson for faith-healing, and that the Secretary write Dr. Griffith and thank him for his interest in the matter. Seconded and carried.

Dr. C. O. Bates then read a letter regarding the late Dr. S. J. Taylor's hospital bill. Dr. Tyler moved that additional money be raised pro rata from the members of the Society to defray this debt; seconded by Dr. Grimball, motion was lost.

Dr. Curran B. Earle moved that the S. J. Taylor Committee go before City Council and ask that body to make up the difference in the bill, and in event of failure to secure the balance, that said Committee be authorized to collect prorata the balance from the members of the Society. Seconded and carried.

The question of the feasibility of organizing a Physicians' Exchange was then brought up. Discussed by Drs. Evatt, W. S. Fewell, Davis, McCalla, H. L. Brockman, J. M. Fewell, Wolfe, and C. O. Bates. Dr. Davis moved that the Secretary publish in the local newspapers that the County Society is not in the process of organizing a Physicians' Exchange for the present, and that any exchange organized now would be a privately operated one.

Dr. Evatt of the Board of Censors then presented the name of Dr. Charles N. Wyatt for election to membership in the Society. Dr. Wolfe moved that Dr. Wyatt be elected; seconded, and unanimously carried.

President Johnston then introduced Dr. Metts who has recently located at Chick Springs.

There being no further business the meeting adjourned.

Irving S. Barksdale, M. D., Secretary.

RIDGE MEDICAL SOCIETY MEETING

The Ridge Medical Society met in Dr. Timmerman's offices, Monday night, the twentieth of February at 7:30 o'clock.

Dr. W. P. Timmerman exhibited a case of contracted bladder and enlarged prostate of more than a year's duration with urinations very frequent, sometimes as often as every fifteen minutes.

Dr. Ben Wyman of Columbia gave an interesting and instructive address on the public health work of this state with special reference to the county health work in its various phases.

This elicited considerable questions and discussions as well as approval.

The secretary asked for reports of committees and individuals as to their activities relative to the Bill before the Legislature regulating the practice of chiropractors.

This excited considerable comment regarding not only the chiropractors but various other cults. All was in the best of humor but some seemed a bit too emphatic.

Supper was served in the Commercial Hotel where Miss Traynham, County Public Health Nurse for Lexington County gave an outline of her ideas, intentions and activities in her work for the ensuing year.

The society voted unanimously their approval of and cooperation in her work.

A member reported having read in a religious paper a communication in which the writer lauded certain doctors and nurses, etc., so highly as to intimate that those not in cities were not efficient. This brought forth various and sundry comments.

Another read some extracts from the bulletin of the American Medical Association as to the difference in prices of proprietary and non-proprietary remedies.

In this he reminded others of the inconsistency of the doctors by not being sufficiently well informed or careful as to save their patrons money when writing prescriptions for them.

The following named were elected delegates to the Medical Association:

From Edgefield County, Dr. J. C. Edwards. From Saluda County, Dr. D. B. Frontis.

From Lexington County, Dr. W. T. Gibson.

Each delegate was authorized to name his alternate.

Resolutions of sympathy and the wish for a

speedy recovery of Dr. Keisler of Leesville, who has been sick for three weeks were unanimously passed.

S. M. Pitts, M. D., President Pro Tem. W. P. Timmerman, M. D., Secretary.

WILLIAMSBURG COUNTY MEDICAL SOCIETY

WHEREAS, Almighty God, the Great Ruler of the universe, in His all-wise providence has removed from our midst a brother physician, W. J. Haselden, M. D.; be it therefore

RESOLVED: First, that in the death of W. J. Haselden the Williamburg County Medical Society is conscious of the loss of a faithful member; and

Second, that this society extend to the family of the late Dr. Haselden sincere sympathy in their hour of bereavement; and

Third, that a copy of these resolutions be furnished the family of the deceased, a copy be filed with the Secretary of the South Carolina Medical Association, and a copy be spread upon the minutes of the Williamsburg County Medical Society.

E. T. Kelley, M. D., R. W. Sease, M. D., B. M. Montgomery, M. D.,

Committee.

Kingstree, S. C., February 3, 1928.

MENTAL HYGIENE SOCIETY OF SOUTH CAROLINA

In November, 1927, a group of physicians, interested in the prevention of mental disease, and in increasing the mental health of the people of the State, organized in Columbia a State society, the purpose of which is as follows:

"The chief purposes of this organization are: To work for the conservation of mental health: To help prevent nervous and mental disorders and mental defects: To help raise the standard of care and treatment for those suffering from any of these disorders and defects: To secure and disseminate reliable information on these subjects, and also on mental factors involved in other related problems: To further psychiatric social work: To cooperate with Federal, State and local agencies whose work is in any way related to that of the Mental Hygiene Clinic.

The officers of the Mental Hygiene Society of South Carolina are:

President: Dr. Sylvia Allen, Charleston, S. C. Vice-President: Dr. Patterson Wardlaw, University of South Carolina.

Secretary-Treasurer: Miss Lavinia Keys, Connie Maxwell Orphanage, Greenwood, S. C.

Executive Board: Dr. C. F. Williams, State Hospital, Columbia, S. C.; Dr. B. O. Whitten,

State Training School, Clinton, S. C.; Dr. O. B. Chamberlain, Medical College of South Carolina, Charleston, S. C.

It has not been difficult to find persons interested in becoming members, laymen as well as physicians cordially welcomed. It has grown steadily, and consists of members of many professions, organizations and institutions, as well as parents, all of whom have some part in the training of the mental life of the people. The dues have been placed at a small figure, one dollar a year, so that anyone interested could find it possible to belong.

The work of the Society has been delegated to departments, each of which has a committee Chairman in charge. Each department is studying the existing facilities in South Carolina, which are or could be used as a means of promoting healthy-mindedness. Then each departpartment plans to outline the facilities that are needed in the State in the order of their importance. The departments with their Chairman now stand as follows:

Committee on Insane & Epileptic: Dr. E. L. Horger.

Committee on Feebleminded: Dr. F. I. Webb. Committee on Social Agencies: Miss Ethel Sharpe.

Committee on Universities: Dr. G. Croft Williams.

Committee on Institutions: Mr. Thomas D. Noe.

Publicity: Mr. H. N. Massey.

Committee on Courts and Probation: Dr. J. Moss Beeler.

Committee on Recreation: Miss Norma Hallett.

Committee on Public Schools: Miss Ida M. Colson.

Committee on Public Health: Dr. Jos. I. Waring.

The primary object back of this careful procedure is to so organize the State that all work for mental health will be well-rounded out, that every possible facility towards that end will be used, and used in a concerted way. We have long had our excellent State Hospital, (built in 1751 for the care of the lunatic slaves), which has grown to huge proportions with a very fine system of movable clinics through-out the State, stabilizing those who do not need hospitalization yet cannot stand alone; following up the numerous parole cases; preparing the home for those who will later return; testing and studying new cases and teaching the positive principles of good mental health. This is no light task, and it is hard - to conceive of one more fundamental for the happiness and for the greatest development and efficiency of the people.

Medicine has gone far in its knowledge of public health of a physical nature. This is now a

highly developed science. It is a well recognized fact that one of the next most important steps is the training of the emotions, and the successful adjustment of the personality to meet the stress and strain of everyday life. More and more in private practice are doctors seeing wrecks of humanity, who might have been saved this greatest of calamities, a mental break down, if they had been diagnosed while young, and a proper system of training instituted.

This new child of Medicine, Mental Hygiene, has grown up to meet this very need, as it considers the individual in his entirety; his environment, his heredity, his personal relationships, his training, and every influence that might have had any bearing on the present conduct of the patient. This need was felt, not alone by the medical profession, but also by the educators, the social workers, the eugenists, the churches, etc. When the physician turned his attention to mental aspects of medicine, he naturally searched for causes, as all medical men do, with the hope of prophylaxis in mind. This led him into fields in which the social workers were already deeply involved, the priests were adding their teachings, urgings and warnings; the educators, with worried looks, were wondering how to make a mind more receptive. The medical men stepped forward and took their usual leading part in this new science of Mental Hygiene.

This term, Mental Hygiene, is not defined in Webster's Dictionary, for it is yet too youthful, having been in existence for less than twenty years. However, the newspaper editors and the modern novelists are using it constantly. The criginal motive of this science was improving the care of the insane, but now it includes the prevention of insanity and far more. Its concept is a growing one, full of dynamics, reaching out to the life of the relatively normal individual, giving him far more use of his innate ability, and freeing his mind for constructive thought.

The modern note in Mental Hygiene was struck by Dr. William White in his book, "Principles of Mental Hygiene," published in 1917. The late Dr. Thomas W. Salmon, known internationally for his great work on the neuroses in the recent war, was equally well known for his far-reaching reforms in the care of the insane in this country, the most far-reaching reforms since the days of Dorothy Dix. As Medical Director of the National Committee for Mental Hygiene, he was the great promoter, though not the founder of this entire movement for mental health, giving it "sound professional direction and a momentum that carried it over into practically everyday life."

This Society will hold an interesting conference on Mental Health the day before the Spring meeting of the South Carolina Medical Association, in Columbia. To this conference will be

welcome any one interested. The announcement of the speakers will be sent throughout the State.

South Carolina Society for Mental Hygiene,
Lavinia Keys, Secretary-Treasurer.

FOR THE TREATMENT OF PNEUMONIA

The vaccine treatment of pneumonia has not given very satisfactory results. With the purpose of obviating the chief difficulty in the vaccine therapy of this disease, namely tardiness of action, Parke, Davis & Co. have brought out a new antigen, one that represents the vaccine principle but acts much more rapidly. It is called Pneumococcus Immunogen.

Vaccines are killed bacteria. Pneumococcus Immunogen is obtained from cultures of the three specific types of pneumococcus, but there are no bacteria, dead or alive, in it. It seems, from the researches conducted and published by Parke, Davis & Co., that the antigenic principle of bacteria is not so much in the bacteria as on them; it can be washed off. Pneumococcus Immunogen consist of the washings of pheumococci, tested serologically to demonstrate its superiority to a corresponding bacterial vaccine.

The Immunogen is administered, as a rule, intramuscularly, though it can be given intravenously in smaller doses; and the injections may be repeated at intervals of four or five hours.

Literature on Pneumococcus Immunogen is offered to physicians by Parke, Davis & Co.

Broadoaks Sanatorium

MORGANTON, N. C.

A private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits. A home for selected Chronic Cases

JAMES W. VERNON, M. D., Supt. and Resident Physician.

SOME HIGH SPOTS OF COLUMBIA MEETING

OFFICERS—S. C. MEDICAL ASSOCIATION 1928

D. Lesesne Smith, M. D. _____ President
Spartanburg

W. H. Nardin, M. D. _____ First Vice-President
Anderson

William Egleston, M. D. _ Second Vice-President Hartsville

W. R. Barron, M. D. ____ Third Vice-President Columbia

E. A. Hines, M. D. _____ Secretary-Treasurer Seneca

THE STATE BOARD OF HEALTH OFFICES

A picture of one of the magnificent State office buildings of America is shown in this issue. Nearly an entire floor is occupied by the laboratories and many divisions of the State Board of Health.

This new arrangement has added tremendously to the efficiency of a Board, already known throughout the United States.

There are approximately one hundred persons employed by or connected with the Board's activities now, and about three hundred thousand dollars expended in its work annually whereas twenty years ago there was not a single whole time employee and only fifteen thousand dollars available to protect the health of the people of South Carolina. It is the duty of the medical profession of the State to visit their Board of Health Headquarters and see for themselves this marvelous development.

OUR DISTINGUISHED GUESTS

There will be a larger number of invited guests appearing on the various programs of the State Medical Association and its allied organizations than there has been at any meeting in hot history of the Association.

To many Dr. John Lovett Morse, Professor Emeritus of Pediatrics of the far famed Harvard Medical School, is known as the Dean of Pediatrics of America. Certain it is that while chief of this department at Harvard for twenty-five years, a Pediatric School was developed, known throughout the world. During this period the specialty of Pediatrics has become a very definite branch of medicine recognized everywhere and there are few who practice this art and science in this country who have not at some time sat at the feet of Dr. Morse and his very able co-workers at Harvard. His address before

our Association will mark an epoch in scientific medicine in South Carolina.

THE SYMPOSIUM ON OBSTETRICS

To the observant member of the State Association the thought must have been evident that the officers and scientific committee have quietly but surely in recent years undertaken to attack in a serious way the unenviable record of the high maternal and infant mortality in South Carolina. That is a fact and it is confidently expected that concerted action on the part of one thousand doctors in South Carolina as a result of this consistent publicity will save an undreamed of number of lives. The symposium follows:

Symposium on Obstetries

Some Problems of Prenatal Care—By Dr. Oren Moore, Charlotte, N. C.

Conduct of Labor and the Use of Anesthetics
—By Dr. Lester A. Wilson, Charleston, S. C.

The Indications for Caesarian Section—By Dr. Geo. E. Thompson, Inman, S. C.

Post Partum Care—Dr. R. E. Seibels, Columbia, S. C.

An Outstanding Paper on Autopsies by Dr. Kenneth M. Lynch, Director of Pathological Laboratories. Medical College State of South Carolina.

Listen in on it!

THE PURPOSE OF AUTOPSIES IN MODERN MEDICAL PRACTICE

The Autopsy is the foundation of modern clinical medicine. Through it the hidden comes to view, diseases become objects instead of words and names. Through it we learn to interpret symptoms and signs of disease and to visualize structural damage in the light of disturbed function. The autopsy is the gauge of the calibre of service in a hospital. It should be a measure of a physician's interest in progressive medicine. It is an ever increasing source of knowledge; it should be a continuous post-graduate course at home.

DRY CLINICS

A special feature of the Columbia convention will be the clinics. The Association has never undertaken the variety of clinics before the whole body as will be the case this year. These clinics will not be of an operative nature and thus confined to only a few but are visible to

everybody. This is an advance on the type of clinic usually provided. The John's Hopkins Hospital and Medical School will be represented by Dr. J. E. Moore, from the Department of Syphilology. Two of the clinics.

A Clinico-Pathological Conference will be held by Dr. Robert Wilson, Dean of the Medical College of the State of South Carolina, and Dr. Kenneth M. Lynch, Director of the Pathological Departments of the College and the Roper Hospital, on Wednesday morning at the place of meeting of the Association, eight-thirty. Brief histories will be placed in the hands of the members preceding the conference.

On Thursday morning a dry clinic will be given by Dr. J. E. Moore, of the Johns Hopkins Medical School, on Some Aspects of the Management of General Paralysis.

MEETING FOR THE PUBLIC

The State Medical Association at different times has promoted during the convention a special meeting to which the general public are invited. This year an extraordinary effort will be made to make the meeting a success. It will be held on the night of Tuesday, April 17, at the Columbia Theatre.

THE COLUMBIA NUMBER OF THE JOURNAL

Read this Journal carefully, doctor. Take it home to your family. Read the scientific articles

in this issue. Look over the reports from the various county medical societies and the Woman's Auxiliaries. Note the rapid increase of contributions to the Sim's Memorial Fund. Take a good look at the illustrations of the City of Columbia and environs. Pay close attention to the wonderful story of the growth of Columbia. Read the advertisements. The advertisers pay the cost of printing the State Journal and always have supported it loyally. Scrutinize carefully the paper, the printing, and the cover of the Journal. Give your official organ a boost everywhere and all the time and let it serve you in a much larger capacity by virtue of your encouragement.

THE RECEPTION TO THE PRESIDENT

Perhaps the most delightful way to provide an entertainment practicable for the Association, is that of the get together reception and dance on Wednesday night. This will give everybody a chance to meet everybody else and have a good time together.

Dr. and Mrs. James A. Hayne will give a barbecue to the S. C. Public Health Association and the S. C. Mental Hygiene Society after the Clinic and Sessions are over on Tuesday, April 17, at 5:30. All physicians and their wives and members of their families who happen to be in columbia on that date are cordially invited to participate.

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The Journal

of the

South Carolina Medical Association

VOL. XXIV.

GREENVILLE. S. C., MAY, 1928

NO. 5

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The Iournal

OF THE

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EDITORIAL

OUR PRESIDENT

We are indebted to the History of South Carolina by Yates Snowden, LL.D. for the following notes about Dr. Hughes:

The list of eminent professional men of Laurens County who have given the best of themselves in the service of their fellow-men and have firmly established for themselves reputations for sterling integrity and uprightness of character, contains no more highly esteemed name than that of Rolfe Eldridge Hughes, M. D. One of the thoroughly trained members of his profession, in which he occupies a high place by reason of his skill and learning, paying attention to diseases of the eye, ear, nose and throat, he has also come close to exemplifying the highest ideals of citizenship.

Doctor Hughes was born at Columbia, Virginia, May 5, 1868, a son of E. Tucker and Nanie B. (Perkins) Hughes. The Hughes

family is of Virginia, where the early progenitor of the name settled. Doctor Hughes is of the ninth generation in descent from Pocahontas. His grandfather, Thomas A. Hughes, was a son of Thomas A. Hughes, a Revolutionary patriot, and the mother of the doctor as a daughter of Thomas H. Perkins, an eminent physician of Virginia, who was a son of Dr. Frederick Perkins, also of an old Virginia family.

E. Tucker Hughes, the father of Doctor Hughes, served with gallantry in the Confederate army during the war between the States, and when this country entered war with Germany volunteered his services to the United States Army, although he was seventy-three years of age. He has served with distinction as a representative in the Legislature and is one of the distinguished citizens of his community.

Rolfe Eldridge Hughes, was reared at Co-



Rolfe Eldridge Hughes, M. D., President, South Carolina Medical Association, 1928

lumbia, Virginia, where he attended Miller's School, and then entered the University of Maryland, where he took up his professional studies. He received his degree of Doctor of Medicine at Baltimore in 1892 and following his graduation commenced the practice of his calling at Abingdon, Virginia, where he remained until 1808. Coming then to Laurens, he established himself here in a professional capacity, and since had gained a large, representative and remunerative practice among the best families. He is a member of the Laurens County Medical Society, the South Carolina State Medical Society, Southern and the Tri State Association of the Carolinas and Virginia, of which last named he has served as Secretary and Treasurer for seventeen years, and was made President in 1907. Fraternally, the doctor is a Master Mason and a member of the Knights of Pythias and the Benevolent and Protective Order of Elks.

In 1900 Doctor Hughes was united in marriage with Miss Hallie W. Cosby, of Virginia, and they have three children: Charles E., Harriet W. and Rolfe E., Jr. The doctor and family are communicants of the Episcopal church.

COMMENTS ON THE COLUMBIA MEETING

The attendance at the Columbia meeting approximated seven hundred which included the doctors, visitors, public health workers, and the Woman's Auxiliary. This number is an increase of about two hundred over the Anderson meeting last year. It is certainly remarkable for a small State like South Carolina with an active medical population of less than one thousand. There are several reasons for this gratifying epoch making record. First of all, the program was satisfying in its wide scope, its concentrated interests from a practical standpoint and the strictly limited number of papers. This brought the crowd. As the program was put in motion by President D. L. Smith and the other officers in charge of allied organizations, not a moment was allowed to drag. Everything moved on time and closed on time. The Columbia Medical Society, through their various highly efficient committees, Dr. M. H. Wyman, General Chairman, functioned in perfect accord with the spirit of the State Officers. Too much praise cannot be given to our friends in Columbia for their splendid efforts in making the eightieth meeting a memorable one from every standpoint. The Commercial and Scientific exhibits were very creditable. These are increasing year by year. The House of Delegates, a full report of which will appear later, showed keen interest in all of the affairs of the Association. The reports of the President and of the Secretary and the various Councilors all concurred that the South Carolina Medical Association is flourishing from every standpoint. For a number of years there has been rapid progress owing largely to the wise constructive leadership of the men who have been elevated to the Presidency. Dr. Smith as have other Presidents in recent years visited every section of the State and inspired the profession wherever he went with higher ideals for the organization and for scientific medicine. His recommendations to the House of Delegates to be commented on later should have a far reaching influence for good.

The Woman's Auxiliary under their very able President, Mrs. H. M. Stuckey of Sumter brought the Sim's Memorial in view of a successful termination. It is planned to erect the monument to Marion Sims on the State House Grounds and unveil it in October, 1928. The Auxiliary desires that all subscriptions due by County Medical Societies be paid in as early as possible to the Treasurer, Mrs. William A. Boyd, of Columbia. This very worthy campaign conducted by the Auxiliary has attracted close attention throughout the United States.

The entertainments during the Columbia meeting were well planned, carefully executed, and delighted everybody. The weather was perfect. Travel conditions to and from Columbia were conducive to a large attendance. The central point also promoted the meeting.

The unanimous election of Dr. R. E. Hughes of Laurens to the Presidency has few precedents in our Association, there being no candidates nominated in opposition to him. This is considered in itself a very great honor. Dr.

Hughes has had a long and successful career in organized medicine. He will fill the position with dignity, with magnanimous consideration for the wishes of his friends and add lustre no less creditable to the high office than his predecessors.

ORIGINAL ARTICLES

PRESIDENT'S ADDRESS

THE PHYSICIAN IN SOUTH CAROLINA HISTORY*

By D. Lesesne Smith, M. D., Spartanburg, S. C.

When I was elected President of the South Carolina Medical Association, it became necessary for me to cast about for a subject for my annual address. It has been my habit, when wishing to familiarize myself with any particular subject, to write a paper about it. It so happens that recently I came to realize that I knew little about the history of the physician in South Carolina. I rather suspect that many of you are in the same case. I decided, therefore, that I could hardly use my time and yours to better advantage on this occasion than by going over that subject.

I can truly declare that I have derived a great deal of pleasure as well as profit from the study of this special phase of our state's development, devoting to it many long winter evenings during recent months. I hope the story I have prepared will be as interesting to you as it has been to me.

We are all being deeply impressed these days with the profound and rapid changes overtaking the world of men and their ways, yet some things change little. For instance, I call you to observe what lay on the minds of the doctors present at the initial meeting of the Faculty of Physic in Charleston, June 2, 1755, Dr. John Moultrie presiding. They adopted the following resolution:

"That considering they are often called out under the greatest inclemencies of the weather, sometimes merely to gratify the patient, and sometimes when no medicines are required, or only such as the families themselves are provided with, and likewise that they are often slowly and seldom sufficiently paid for their solicitious care in promoting the greatest of all temporal blessings—nay, that without which life itself would be a misery, viz., the health of their fellow-citizens, neither can they think that the payment of an apothecary's bill a sufficient reward to him, who acts in the three distinct offices of physic, surgery and pharmacy."

"They therefore have unanimously resolved, that after the tenth instant, they will give no further attendance without a reasonable fee paid at first, and at every other visit during the course of their attendance."

Thus they sternly resolved on that June day 173 years ago, but I deeply suspect that their fellowmen received about as much service afterward as before

The very first white man ever to reside in this state seems to have been a physician. Dr. Henry Woodward came to our shores with the ill-fated expedition of Sir John Yeamans from Barbadoes in 1665. It was at Port Royal he landed and, being interested in scientific exploration, chose to stay for a year as the hostage for the Indian chief's son, who was under medical treatment. After his later capture by the Spaniards from whom he escaped he became a valued friend of the Indians and finally reached the sources of the Savannah River. where he made treaties with the Indians. He afterwards became deputy for the Earl of Shaftsbury to purchase Indian lands. It is not known what ultimately became of him.

George Smith, second son of Land-grave Thomas Smith, was born in 1672 at Old Town on the Ashley River, being among the first native born sons of the colony. He appears to have been the first native born citizen to take a medical degree, which he did at the age of 28 in the year 1700. Although we have this on very good authority, it conflicts with the

^{*}Read before the South Carolina Medical Association, Columbia, S. C., April 18, 1928.

statement of another excellent authority, Dr. David Ramsay, who says that Dr. William Bull, graduated at Leyden in 1734, was the first native son to get a degree in medicine. Dr. Bull, however, was soon drawn into public life, where he became prominent, influential and widely known. Of his work as a physician next to nothing is known.

Dr. John Rutledge and his brother, Andrew, a lawyer, came from Ireland in 1735. Little is known of Dr. Rutledge's practice. He was appointed surgeon of the First Regiment of militia, organized by Lieut.-Gov. Bull in 1738. He is really best known in history as the father of that illustrious trio, John, Edward and Hugh.

A remarkable strong character was Dr. John Kilpatrick. There is a record of his marriage as early as 1727 and for many years he lived in Charleston. During a period of twenty years, when vaccination was prohibited in England, Dr. Killpatrick steadily persisted in its use, making valuable observations all the He wrote a paper summarizing his experience with over 800 cases of vaccination in a smallpox epidemic in Charleston in 1837. This paper reached the mother country and aroused so much attention, that its author was called to England where he carried on the work of inocculation so effectively as to gain national reputation and revive the general practice of inocculation. But he changed his name from Killpatrick to Kirkpatrick, because sharptongued opponents made too much of the 'kill' in Killpatrick.

Drs. John Linning, Lionel Chalmers and Alexander Garden, all natives of Scotland, settled in Charleston early in the eighteenth century. They wrote many medical and scientific essays on climatic and other conditions peculiar to that region, thus laying an intelligent foundation for the practice of medicine in this new country and bringing Carolina early into the literature of the profession.

Dr. Garden became not only one of the most famous of colonial physicians, but was celebrated as a botanist. He corresponded with the great Linnaeus. The well known flower, Gardenia, was named for him.

Dr. Linning wrote a great deal, but I have been unable to locate much of it. His care-

ful study of the excretions of the body for one year was a remarkable work of close, accurate observation and record.

Dr. Lionel Chalmers in 1776 published a book, which covered a long period of experience and painstaking observation. He gives an extraordinarily complete record of weather conditions, including both temperature and rainfall, over a long period. To show how keen were his observations I will quote him on convulsions in children:

"When the belly is bound and the fever high, there is danger of convulsions, which do not happen frequently unless the first passages are bound with acrimonious humors or flatulencies, the extremities being cold. Under these circumstances children with large heads or broad foreheads are most liable to convulsive disorders, especially at the beginning of fevers."

Dr. Chalmers gives a very accurate description of the symptoms and course of whooping cough. It seems that the first epidemic occurred in Charleston in 1728, the second not until twenty-one years later and the next one six years later. You will observe that he had accumulated in his day about as much information about the treatment of this disease as we have today, for he says:

"In this distemper I have tried all sorts of balsams and pectorals without any advantage; and other relaxants rather did harm. Opiates alone were of little use, although I indiscreetly stupefied many patients with them. They coughed as fervently, though overwhelmed with sleep, as if nothing had been given them, nor can I say that any benefit attended my efforts, until I considered it a convulsion of respiratory organs owing to some sort of acrimony irritating the nerves that are distributed in these parts, but of what nature I have no knowledge."

Dr. Chalmers published his book in two volumes and in these covered the various fevers endemic in that region. He describes with startling accuracy the various symptoms accompanying distinct types of fever without being able to give them names. We, however, are now only too familiar with malaria, typhoid and other specifically named fevers. He was an eager pioneer, charting paths for oth-

ers to follow in unmapped territory.

In Charleston, 1757, was born William Charles Wells, who studied eventually under Dr. Alexander Garden for three years and in Scotland. While he never actually practiced in this state because of his loyalty to the British crown, being of Scotch descent, he became famous in England as a practitioner and in scientific endeavors. He was the first man after long and minute studies to explain properly the phenomenon of dew.

Dr. Alexander Baron, who practiced medicine for fifty years from 1769 till 1819, left his impress upon Charleston and its vicinity. A most interesting sketch of this remarkable doctor was given in 1810 by Dr. Samuel Wilson. Not only did Dr. Baron practice medicine effectively, but he was a delightful conversationalist and was socially much sought after. To show his humane spirit, I wish to quote Dr. Wilson, who tells us that while Dr. Baron greatly disliked obstetrical practice, yet when he found that this important branch of medicine was "almost exclusively confined to female practitioners, he was moved by motives of humanity to render his assistance, whenever required, and thereby he was instrumental in saving from death many hundreds of the fairest part of creation as well as their tender offspring, whose lives were in jeopardy in the hands of unskilled woman." Dr. Baron was one of the founders of the Medical Society of South Carolina.

One of the outstanding men of the revolutionary period and early years of statehood was David Ramsay. Although he enjoyed a large and lucrative practice, yet he was better and more widely known as an historian and in public service. He wrote a two volume History of South Carolina, a three volume History of the Revolution and a Universal History of the World in eight volumes. These works were extensively welcomed in those days by readers of history. In 1796 he published a valuable work on the soil, climate and diseases of South Carolina. In spite of turning off all this work, we are told that "he never read by the light of a candle," for all his evenings were devoted to family or social life. How he managed all his medical work and this extraordinary output of historical studies in

a day when stenographers and typewriters were unknown must remain a puzzle.

In addition to all this Dr. Ramsay rendered no small public service in his day. He represented South Carolina twice in the Continental Congress during critical times. only this, but when John Hancock, President of the Congress, was unable to serve for a year on account of ill-health, it was David Ramsay, who was elected President pro tem and served for that period with recognized ability. He was a warm personal friend of George Washington and visited frequently at Mt. Vernon. I cannot conclude this sketch of Ramsay without mentioning that he met death in the line of duty as a physician, for he was shot down on the street near home by a man, whom he had adjudged insane, when called upon to act judicially in that connection sometime previously.

It is time that I touch upon the founding of the Medical Society of South Carolina, which was formed in 1780 and consisted of the following members: Dr. Peter Fassoux, Dr. Harris, David Ramsay, Andrew Turnbull, Isaac Chalmer, George Logan, George Carter, James Lynch, Robert Wilson, Elisha Poinsette, George Hahnbaum, and Thomas Suder Tucker. Dr. Tucker, by the way, was Sec'y of the Treasury in James Monroe's administration. This Soiety had for its three aims, we are told, first, the resuscitation of persons nearly drowned; second, medical relief of the poor in their own homes, when attended by young physicians, members of the Society, who needed consultation with elder members: third, the maintenance of Botanical Gardens. Out of the latter grew ultimately the Botanic Society, incorporated in 1805. Dr. Ramsay tells us that previous to 1805 three attempts were made to establish some regulation of the practice of medicine. This society still exists in Charles-

In Dr. Joseph Glover, a native Charlestonian, who graduated from the University of Pennsylvania in 1800, we find a notable pioneer in surgery. In his native city he performed some marvellous operations, considering the conditions of his day. He was the first to perform hysterectomy, to excise a spleen, and the third to do a lithotomy. Ligat-

ing a splenic artery was another accomplishment. Although without avail, he made brilliant attempts at puncture of hydrocephalous heads.

In 1816 Dr. Joseph King, a country practitioner of Edisto Island, performed an operation for extra-uterine pregnancy by opening into the pelvic cavity through the vaginal wall and extracted the foetus with forceps. The mother recovered without any alarming symptoms. A report of this case was published the next year in a medical journal in New York. A description of this operation I have before me and certainly it reveals ingenuity and skill to relieve human suffering, when up against a difficult case with scant equipment.

In 1834 Dr. Ogier published a book, on surgery, which was one of the first of its kind in America. Although not well received, it unquestionably showed energy and much originality on the part of its author.

It was as early as 1822 that Dr. Cooper, the eminent President of South Carolina University, suggested that a medical college be established in this state. This was not, however, the first suggestion to be heard. In the summer of the year previous Drs. Ramsay, Frost and Dickerson had discussed this matter and determined to make an attempt. Upon the failure of the Medical Society to secure an act of incorporation of a medical college, they gave nevertheless a course of public lectures to a very respectable class in the summer of 1822.

They then petitioned the Legislature for a charter, but were refused because of a request for \$15,000. In 1823 the petition was again presented, but without asking for a dollar. This time, no money being involved, the Legislature graciously passed an act in these words:

"Whereas the Medical Society of South Carolina has taken measures for the establishment of a medical school in Charleston, to be conducted by professors chosen by the Society, and at its own expense, and has petitioned for authority to confer medical degrees, and whereas it is the duty of an enlightened government to aid the advancement of science,

Be it therefore enacted, That from and after the passage of this act the Medical Society of South Carolina shall be and they are hereby authorized to organize a medical school to consist of such professorships as they may deem expedient and to confer Medical degrees upon such candidates as may qualify themselves therefor under the regulations which they may establish.'

The College was duly set going under the auspices of the Society, but on the basis of unpaid service by the teachers. Later we find the professors and the Society at outs with each other and, turning out these professors, the Society elected others, even importing some from New York. Upon this the ousted professors kept up their work in an old theater at the corner of New and Broad streets. For three years this went on and then the unfortunate breach was healed and once more the College went on as before under the name of the Medical College of the State of South Carolina.

One member of the first class to graduate from the Medical College became a great physician and teacher, known throughout the country. Eli Geddings, born at Newberry, reared at Abbeville, licensed to practice by the examining board, then attending lectures at the University of Pennsylvania, was still unsatisfied with his preparation when he heard of the opening of the Medical College in Charleston. He became a student and graduated with three others in 1825. Six years later he was called to the Chair of Anatomy at the Medical University of Maryland. Other still more significant calls came to him, including one of the Jefferson Medical College and one to the Medical College of Ohio. Upon the reorganization of the University of Louisville he was offered the choice of any chair he might prefer. In our College he filled at one time or another as might fit the needs of the institution the chairs of Anatomy, of Surgery, and of the Practice of Medicine. He was a very able writer and contributed often to the "American Journal of Medical Science." A valuable manuscript of his on "The Practice of Medicine," the publication of which in a book had been arranged for, was destroyed when Sherman burned Columbia. He died in 1878 in the eightieth year of his age.

From the Medical College there were graduated in 1840 two remarkable men, Drs. J.

Lawrence Smith and St. Julian Ravenel. The former established in Charleston the Medical Journal Review in 1846. Later he was sent to serve as a geologist to the Sultan of Turkey and eventually was crowned with the highest honors within the gift of the scientific world. He was elected a member of the Institute of France.

Dr. Ravenel was "decidedly a man of genius." In spite of painful physical handicaps and meagre resources he persisted in a study in Nature's laboratory of the manner in which plants are sustained and as a result pointed the way to the great phosphate industry. Not for personal profit, but for the free benefit of his fellowmen, he prosecuted this work. It is a great debt that both agriculture and phosphate mining owe to St. Julien Ravenel.

One of the truly great physicians, who has never been given his proper place in history, was Dr. Josiah C. Nott, born probably in Union County, although by repute born in Columbia, to which place his father moved as a member of the State Supreme Court. He graduated from the University of South Carolina in 1824 and from the University of Pennsylvania three years later. For one year he attended the Medical College of the State of South Carolina. In later years he practiced in Mobile, Alabama, where he established a medical college. He also became a foremost ethnologist.

In Spartanburg he had many relatives. They rather regarded him as a fanatic on the subject of the mosquito, yet he was on the right trail. He was the first to connect that insect with yellow fever and published an article in the New Orleans Medical Journal in 1848, wherein he expressed and supported his belief. Thus was this student of disease half a century ahead of his age and his theory has since been thoroughly confirmed. A striking coincidence should here be mentioned. Dr. Nott officiated at the birth of William Crawford Gorgas, the man whose magnificent achievement was to conquer yellow fever in Cuba, Panama and elsewhere by wiping out mosquitoes. Would that the older doctor might have lived to know this fact!

I wish here to call attention briefly to the origin of the South Carolina State Medical

Association, which is now 80 years old. On February 14, 1848, pursuant to a call by the Medical Society of South Carolina in Charleston a large number of Physicians assembled in that city and proceeded to organize a state association, choosing the following officers: President, Dr. James Moultrie; vice-presidents, Drs. J. C. Cain and R. B. Johnson. 1 might point out the interesting fact that the first president of the pioneer Faculty of Physic, South Carolina's very first organized meeting of doctors in 1755, was Dr. John Moultrie. He was doubtless the grandfather of James Moultrie, first president of the State Association.

Dr. F. M. Robinson, of Charleston, who was connected with the Medical College for some years, diagnosed four cases of Appendicitis. He published an account of these in 1847 in the Medical Journal and Review. This is, so far as I can learn, the second report of this disease. Dr. Kelley in his book mentions a first report on the appendix in 1837 and again in 1852, but gives Dr. Robinson no credit for his work, doubtless through failure to learn of it.

I come now to J. Marion Sims, who was unquestionably, I presume, the greatest surgeon ever produced by this State. In fact, he belongs in the company of the world's great surgeons. Born and reared in Lancaster county, he received his medical education in Charleston and Philadelphia. Going back to Lancaster to practice, he lost his first two patients and was so profoundly depressed by that experience that he took down his office sign, threw it in the bottom of a well and seriously meditated turning to some other occupation. Although he did not quit the profession, he did quit the scene of his two failures and went in 1840 to settle near Montgomery, Ala., where he soon built up a fine practice. Here he was destined to live thirteen years, until complete failure in health compelled him to seek a different climate and water supply in New York.

He himself considers his first valuable discovery to have been the correct diagnosis and successful treatment of trismus nascentium or tetanus neonatorum. But of course his great and conspicious contribution to human welfare was the discovery, after nearly five years of infinitely patient persistence despite almost every conceivable discouragement, of a method

of curing perfectly any case of vesico-vaginal fistula. In a little hospital built on his own premises Dr. Sims worked on young negro patients. At times the intensity of his anxiety and suspense, together with sheer amount of labor, gravely threatened his health, so that friends and relatives, losing confidence in his purpose, almost angrily protested against further exhausting effort.

Finally, after operating 20 times on one case without securing perfect suture healing of the bladder, he was walking across his yard one morning, caught a glint of sunlight from the ground at his feet, picked up a bit of very fine brass wire, handled it for an instant and suddenly there flashed across his mind the thought "wire! Silver wire for suturing." In a nervous suspense, but with intensity of new hope, he operated on Betsey for the thirtieth time next day. Even today it is a moving experience to read Dr. Sim's own account of his feelings, when a week later examination showed that the silver suture was completely successful and poor Betsey could walk forth-a young woman freed from a foul and cruel handicap on life. Tens of thousands of women since have similarly been saved by virtue of this extraordinary achievement in 1849.

Becoming later in that year the victim of a pernicious diarrhoea, Dr. Sims for two years became incapicitated and drew near death several times. Finding relief only in the north, he decided to settle in New York City and establish a hospital for women. Here again indomitable persistence and heroic endurance were required to weather extreme poverty, professional coolness toward his plan and public indifference. These were finally overcome, however, and the Hospital established, soon acquiring national fame.

Worn down again to the danger point by ceaseless work, he went abroad early in 1860 to rest, but was not allowed to be idle for long. European surgeons were eager to learn his technique and an insistent demand held him there, where he saw that his work would carry relief to multitudes in that crowded continent. Meantime the war between the states developed into desperate struggle. Some think that he should have returned to the South at such a time, but they forget that he left there in the first place

only after a prolonged struggle for health and life itself, during which he went north and recovered, then returned South only to have his trouble recur in virulent form again, remaining unrelieved till he went North. There would have been serious difficulties, too, in getting his family back into the South and property matters settled, after war conditions had been thoroughly imposed upon the country during his first months in Europe. But Dr. Sims did send money generously to aid his native country in its struggle.

Dr. Sims died in 1883 having attained worldwide fame, richly deserved by original work in surgery, which went to relieve untold miseries, especially among women. In him South Carolina had a great and worthy son.

Dr. R. A. Kinloch, of Charleston, was the first surgeon ever to do a laparotomy for gunshot wounds of the intestine. This was done in Summerville, S. C., on a Confederate soldier, who lived for many years afterwards. This was reported in the American Journal of Medical Science in July, 1867. Dr. Kinloch also deserves special mention for originating a method of treating fractures of the lower jaw by suturing fragments, when retention by other means was impossible. Dr. Kinloch was recognized as one of the leading surgeons of the country in the days of pioneer work with antiseptics.

In 1893 Dr. Edward F. Parker, of Charleston, wn the \$50.00 prize offered by Dr. Joseph Price, of Philadelphia, for the best paper on surgery in South Carolina. This paper was read before the State Medical Association at their annual meeting. Dr. Parker's father, Francis L. Parker was Professor of Anatomy at the South Carolina Medical College for a number of years, was also Dean of the College and greatly beloved by all his students. He was the first surgeon ever to suture a nerve.

This series of biographical sketches should by all means refer to a son of South Carolina, whose medical career was highly distinguished, but whose great contribution to the welfare of this region happened to occur in another field of interest. I allude to Dr. W. Gill Wylie, a native of Chester, a Confederate veteran, a graduate of South Carolina University and later of Bellevue Medical School. He prac-

ticed in New York and there established the Bellevue Training School for Nurses in 1872.

Dr. Wylie, however, never lost interest in his native state and about 1900 became concerned with his brother, Dr. Robert H. Wylie, in building a dam on the Catawba to develop hydroelectric power. This pioneer undertaking struck engineering and financial difficulties that threatened collapse. The engineering obstacles were overcome, when W. S. Lee was brought to the problems. But formidable financial troubles remained.

About this time Mr. James B. Duke suffered the misfortune to have an infected toe and Dr. Gill Wylie treated it. Talk developed about the Doctor's dream of power development on the Catawba. Mr. Duke became interested and then convinced. The rest of the story of the Duke hydro-electric power development I need not tell this audience nor of the great Duke bequest in the interests of better care of the sick in the Carolinas. Obviously, had Dr. Wylie and Mr. Duke never met or had Dr. Wylie never come to believe first in hydro-electric power, the history of both industry and medicine in South Carolina would have been very different. It was a meeting of two vigorous and creative minds and our country was immensely the gainer.

Before bringing this paper to a conclusion, I wish to direct your attention to four remarkable genealogies.

About the middle of the eighteenth century Dr. Robert Wilson came to this state from Scotland. A daughter of his married Wm. Hasell Gibbes. Since then there have been well known, influential physicians of the Wilson and Gibbes descent until this day. Two sons of the original Scotch emigrant, Robert and Samuel, were both doctors. A grandson of the second Robert and his namesake, practiced medicine. A great grandson is Dr. Robert Wilson, contemporary with ourselves, and his

son is now a student at the Medical College of the State of South Carolina. A grandson of the original Robert Wilson in the Gibbes line was Dr. Robert Wilson Gibbes, father of the present Dr. Robert Wilson Gibbes of Columbia.

Early in the last century there came from Leeds, England, Dr. Robert Smith Bailey, already distinguished as a physician and a F. R. C. P. His son, Thomas P. Bailey graduated from the South Carolina Medical College, was surgeon to the 10th S. C. Regiment throughout the war, after which he settled in Georgetown and did his part in bucking the carpetbag regime. His son, C. Williams Bailey, many here have known, while his grandson of the same name is today a rising young specialist in pediatrics.

In 1825 there came to this state from Massachusetts Joel W. Wyman, a graduate of Amherst College. He graduated in 1831 from the South Carolina Medical College and settled in the old Beaufort district. He had four sons, four grandsons and two great-grandsons to graduate from South Carolina Medical College. Four other Wymans, grandsons, and one great-grandson got their medical education in Augusta, but practiced in this State. One great-grandson is now attending the South Carolina College. Thus we find no less than sixteen physicians of Wyman descent in the past history and present life of South Carolina.

I have been strongly tempted to pause and dwell upon the striking individual records of physicians bearing the above honored names in our state, but this paper, I feel, is already too long and lack of time quite forbids more detail.

While "the half has not been told," I hope that I have shown something of the fine and worthy contribution, which sons of South Carolina have made to medical progress and the aleviation of human suffering. It is a record to inspire patriotic pride and to stimulate progressive efforts in the future.

THE VAGARIES OF PEDIATRICIANS*

By John Lovett Morse, A. M., M. D., Professor of Pediatrics, Emeritus, Harvard Medical School, Boston.

I feel somewhat diffident about speaking of the vagaries of pediatricians and of physicians in general in their treatment of children, when I am so far from home, because, while I know what is being done in New England, I am not acquainted with local conditions in the South. I am inclined to think, however, that the fashions in medicine are much the same throughout the United States and that physicians are just as thoughtless and just as "easy marks" in one part of the country as in another. At any rate, I shall assume that they are, and discuss some of their vagaries much as if I was in Boston.

"Acidosis"

True acid intoxication is a very uncommon condition. Nevertheless, many physicians make this diagnosis whenever a child vomits, is toxic in any way, is sicker than the symptoms seem to warrant or they do not know what is the matter with it. As a general rule, it is safe to say that when this diagnosis is made, it is the one thing which the child certainly has not. It is also safe to say that the vast majority of the physicians who are in the habit of making this diagnosis do not know accurately what acid intoxication really is.

In brief, acid intoxication develops when the equilibrium between the production of acids in the body and the powers of elimination is disturbed. This may be the result of an overwhelmingly rapid production of acids or of the inability of the kidneys to excrete the normal amount of acids. The inability of the kidneys may be due either to disease of the kidneys or to an insufficient supply of blood to them. The only pathognomic symptom of acid intoxication is hyperpnea. The presence of acetone bodies in the urine does not justify the diagnosis. Neither does the presence of acetone in the breath necessarily mean acidosis, that is, a lowering of the alkali reserve.

If a true acidosis is present, it must be remembered in deciding upon what treatment to use that it may be due to an excessive formation of the acetone bodies as the result of the faulty metabolism of fat in the absence of a sufficient amount of carbohydrates or to the inability of the kidneys to excrete acids, mainly acid phosphates. Typical examples of the two types are the acidosis which occurs in diabetes, in infections and after anesthesia on the one hand and that which develops in the course of severe diarrhea on the other. The treatment of the two types is radically different. In the first place

neither should be allowed to develop. Both can be prevented by proper care. In brief, the treatment of acidosis due to the acetone bodies is the administration of glucose, or dextrose. In mild cases glucose and orange juice by mouth are sufficient. It must be remembered, however, that an excessive amount of orange juice may cause vomiting and diarrhea. Glucose may be given in 5% or 10% solution by the mouth. In severe cases it may be given in 5% solution by rectum. In still more severe cases, in 5% solution subcutaneously or 10% solution intravenously. In the most severe cases, one unit of insulin should be given subcutaneously for each three grams of glucose. Bicarbonate of soda is probably inadvisable in this type of acidosis and may even cause alkalosis. In the type caused by severe diarrhea, glucose is useless. The treatment consists in supplying liquid to the system by mouth, rectum, subcutaneously or intravenously. In the type due to disease of the kidneys, water should be given freely and the usual measures to stimulate the kidneys employed. Bicarbonate of soda sometimes helps in this type. It is evident that unless the type of acid intoxication is known, treatment is as likely to be wrong as right. That is, there is no routine treatment and it is not right to give orange juice and glucose to every case of acd intoxication as is so commonly done.

The Thymus Obsession

It is becoming increasingly common for physicians to attribute all disturbances of respiration, whether constant or intermittent and whatever their characteristics, to enlargement of the thymus. Physicians are also likely to attribute convulsive attacks of all sorts, fleeting cyanosis and many other disturbances for which they see no obvious cause, to the thymus. They are likely to be a little vague, however, in their explanations as to how the thymus causes these symptoms. Finally, they explain sudden deaths, whether or not on the operating table, to "status lymphaticus," of which they apparently consider enlargement of the thymus to be the essential factor. They are even more vague, however, in their explanations as to how either the thymus or "status lymphaticus" can cause death. The obstetricians and the Roentgenologists go so far as to say that Roentgenograms should be taken of the thymus of every infant at birth and treatment given with the Roentgen ray if the shadow of the thymus is larger than they think it should be. The Roentgenologists also say that Roentgenograms should be taken before every operation and Roentgen ray treatment given if the shadow is supposed to be enlarged.

There are so many fallacies connected with the Roentgen ray diagnosis of enlargement of the thymus that it is hard to consider them all. There

^{*}Address of the invited guest before the South Carolina Medical Association, Columbia, S. C., April 18, 1928.

is no doubt that the thymus shows as a shadow in the Roentgenogram. The size of this shadow varies materially, however, with the technic employed, the position of the child and the phase of respiration in which the picture is taken. Roentgenograms show nothing, moreover, as to the thickness of the thymus, which in relation to pressure is more important than the width. The size of the thymus varies from day to day and probably from hour to hour, according to the amount of blood which it contains. It varies with age. It varies directly with the general nutrition. It is diminished in disease. It is extremely difficult to say, therefore, even if a Roentgenogram is correctly taken, whether the thymus is or is not of normal size for the individual infant at the given time.

The thymus may, theoretically, cause disturbance by pressure on other organs in the superior mediastinum or by an increase or diminution in its secretion. There is no evidence to show, however, that it has any secretion after birth. All the evidence there is goes to show that it is simply a lymphoid organ without any more effect on the functions of the body than other lymphoid tissue. It is obvious, therefore, that none of the symptoms which are attributed to enlargement of the thymus, outside of those due to pressure, are connected in any way with the thymus.

There is no doubt that enlargement of the thymus may cause disturbance of respiration by pressure on the trachea. It is barely possible that it may cause cyanosis of the head and upper extremities by pressure on the large veins. It is very doubtful if it can compress any of the other structures in the mediastinum enough to produce any symptoms. When the thymus is enlarged enough to cause pressure on the trachea, respiration is noisy in both inspiration and expiration, never in one alone. The enlargement of the thymus can be detected by percussion. The thymus is usually palpable in the suprasternal notch and the larynx does not descend with inspiration. The symptoms are increased by extension of the head. It is not necessary to take a Roentgenogram to make the diagnosis. If respiration is not noisy in both inspiration and expiration, the difficulty is not due to enlargement of the thymus, no matter what the size of the shadow of the thymus may be. Nevertheless, many other diseases or conditions are attributed to enlargement of the thymus because of ignorance of or overlooking these simple facts. Among the conditions which I have seen attributed to pressure from the thymus are adenoids, congenital laryngeal stridor, laryngismus stridulus, idiocy, retropharyngeal abscess, tracheobronchial adenitis, bronchitis, asthma, mediastinal abscess and a round worm in the larynx. A little care in the analysis of the symptoms and in physical examination would have avoided these mistakes.

It hardly seems possible that an enlarged thymus could cause enough pressure on the veins to cause cyanosis without also causing difficulty in respiration. Nevertheless, I have seen the diagnosis of enlargement of the thymus made—sometimes with Roentgenograms, sometimes without—in congenital heart disease, atelectasis of the lungs, cerebral hemorrhage, congenital debility, chilling and diaphragmatic hernia. All of these mistakes were due either to failure to consider and look for other causes of cyanosis besides an enlarged thymus or undue confidence in the interpretation of a Roentgenogram.

There is no doubt that in certain instances of sudden death without apparent cause or from some apparently insufficient cause, there is found enlargement of the thymus, spleen, lymph nodes, tonsils and Peyer's patches with hyperplasia of the bone marrow and hypoplasia of the heart and This combination has been given the name of "status lymphaticus." When this condition has been found in instances of sudden death without apparently sufficient cause, it has been assumed that it was the cause of death. It is purely an assumption, however, because it is often found post mortem in cases which have died from other causes and there are plenty of sudden deaths in which this condition is absent. There are, furthermore, numerous cases on record in which "status lymphaticus" was supposed to be the cause of death in which the true cause was finally discovered. There are many reasons for believing, moreover, that hyperplasia of the lymphoid tissues of the body is a normal condition in growing, healthy children and that what is called "status lymphaticus" is simply what would be expected to be found in a normal, healthy child that has died suddenly. It has been assumed that the enlargement of the thymus is the most important part or the primary cause of the picture seen in "status lymphaticus". It is difficult to understand, however, how the thymus, which after birth is simply a lymphoid organ, can cause any changes in the other organs of the body. This being the case, it is evident that the size of the thymus can be no guide as to the presence or absence of the condition known as "status lymphaticus." It is also evident that shrinking of the thymus can have no effect on this condition. It is evidently irrational, therefore, to take Roentgenograms before operation and to give Roentgen ray treatment if the shadow of the thymus is supposed to be enlarged. The fact that children have not died during operations after Roentgen ray treatment of the thymus does not show that they would have died, if they had not had the treatment. It is said that Roentgenograms show that the thymus is enlarged in 7% of all children under 10 years of age. It is certain that 7% of the children who were anesthetized in the past

before Roentgenograms were taken or any attention paid to the thymus, did not die under anesthetization. Is it not reasonable to believe that children who die under anesthesia now, as in the past, die because the anesthetization is poor or operative judgment and technic imperfect? a matter of fact, an acute insufficiency of the secretion of the adrenals would seem to explain these sudden deaths better than anything else, unless it be the sudden and marked change in intracerebral pressure, resulting from anesthesia and shock. However justifiable and unreasonable it may be to connect the thymus with sudden deaths, to believe that an enlarged thymic shadow means that a child is in danger of sudden death from anesthetization or operation, to claim that a Roentgenogram should be taken of every child before anesthetization or operation, Roentgen ray treatment given if the shadow is supposed to be enlarged and that the physician or surgeon who does not follow this course of procedure is negligent, nevertheless, it places the conscientious physician, who wishes to do everything that is necessary for his patients, but also wishes to remain an honest man and to save his patients unnecessary expense, in an unfortunate position. At present, about all that he can do is to explain the situation to his patients and let them decide what they wish to have done. Fortunately, he can be comforted by knowing that this fad, like so many others, will wear itself out and that common sense will again prevail.

Vaccines

All the scientific evidence there is goes to prove that vaccines can not only do no good, but may do actual harm in acute infections. Nevertheless, many physicians treat all acute infections of the respiratory tract in this way. It is difficult to see why they do it. Possible explanations are that they are dazzled by the claims of the manufacturers, that they are poor observers and attribute to vaccines the improvement due to nature, that they feel that they must do something, whether it does any good or not, or that they need the money.

Vaccines are, however, undoubtedly of use in some chronic infections, such as furunculosis and acne. There is also no doubt that in a certain proportion of cases, a course of vaccines in the autumn may diminish the number of acute respiratory infections in the winter. The chances of this happening, however, are not much better than one in five. It is not honest, therefore, to give such a course without explaining this to the patient or its parents. Although there is much difference of opinion on this point, it seems more reasonable to use autogenous than stock vaccines, even though it is easier to buy a bottle at the drug store and use it on everyone until it is gone. Opinions differ also as to the value of

vaccines in whooping-cough. The evidence seems sufficient, however, to show that they have some value in prophylaxis, a little in the early stage and none thereafter.

Glandular Extracts

Everyone who has taken the trouble to read carefully the articles on the glands of internal secretion in the Journal of the American Medical Association, which were written by the best informed and clearest thinking men in the country, instead of reading the propaganda sent out by manufacturers or listening to the "spiels" of their salesmen, appreciates how little is really known as to the action of these glands and how much of what is said about them is theory and how little fact. He also realizes that, while he knows very little as to what the extract of a single gland will do, he knows nothing whatever as to what may happen when a combination of the extracts of several glands is given, provided they all work. If they work, they may neutralize each other, reinforce each other, start up or stop the action of other glands, no one knows which. Nevertheless, many doctors prescribe these pluriglandular extracts freely in all sorts of diseases and disturbances of nutrition, and are willing to take the chances as to what may happen. Fortunately, both for them and their patients, nothing does, because, in the doses which are usually given by mouth, the only extract which can have any action is the thyroid. This being the case, it seems more reasonable to give thyroid extract alone instead of in combination with a mess of inert substances. In addition to its specific action when there is an insufficiency of the thyroid secretion, thyroid extract acts, of course, as a stimulant to the metabolic processes of the body. If these are depressed, it will do good; if they are not, it will do harm. It is on account of this stimulating action that it sometimes seems to help feebleminded children. The improvement is only temporary, however, and it is wicked to encourage parents in the belief that any form of glandular therapy will cure their idiotic children. A potent parathyroid extract may help in spasmophilia. The same results can be obtained more certainly and much more rapidly by the use of calcium chloride or ultraviolet irradiation. It is possible that enormous doses of pituitary gland by mouth may have some action. Unless given in enormous doses, however, it is inert. Some of these glandular extracts, when given subcutaneously, are of course, definitely active. I have referred only to their oral administration.

Rickets and Cod Liver Oil

Undue stress has been laid on rickets during the last few years. The public, especially mothers, are being unnecessarily frightened and worried. It is true that Roentgenologic evidences of rickets can be found in almost all babies. It is also true that clinical, bony evidences can be found in from 80% to 90%. In the vast majority of cases, however, these evidences are very slight and there are no other symptoms. The general condition and development are not affected. It is very questionable whether these minor Roentgenologic changes or even slight clinical, bony changes, like a slight rosary, really mean rickets. It certainly seems strange that so many babies-breast fed, getting plenty of air and sun and developing normally-show them, if they really mean disease. It is certain that, even if they do, the condition is unimportant and parents should not be worried about it. It is very different, of course, if bony changes like craniotabes, enlargement of the epiphyses at the wrists and ankles, and deformity of the chest are present, or there are constitutional symptoms. In the past I never said anything about these minor changes to parents, because I did not wish to worry them. Nowadays I mention them, tell them that they are unimportant and that I mention them only because, if they happen to fall into the hands of some young and enthusiastic doctor or of one who prides himself on being up-to-date, he will tell them that the baby has rickets and they might think that I had not found these signs and did not know my job.

It has been believed for many years that cod liver oil helped rickets. It has now been proven that it will cure it. It has been taken for granted recently that, as cod liver oil cures rickets, it will also prevent it. The custom has, therefore, arisen of giving all babies cod liver oil, no matter how they are fed, what their status in life or how much fresh air and sunlight they get. Incidentally, it is worth while in this connection to remind those pediatricians who are so fond of whole milk mixtures because they fear fat indigestion, that a teaspoonful of cod liver oil contains as much fat as an ounce of 16% cream. Eliot (J. A. M. A., 1925, 85, 656) found that cod liver oil did not prevent the development of "rickets" in rapidly growing infants and that the signs were more marked in those that were gaining and thriving than in those that were not. The question at once arises, therefore, whether what is called "rickets" in these cases is not really physiologic. Wilson (Amer. Jour. Dis. of Children, 1926, 31, 603) found that 97% of infants born in the summer and 91% of those born in the winter showed Roentgenologic evidences of "rickets" in spite of cod liver oil. These findings raise the same question as to whether the picture is not normal. Clinical evidences of rickets were present in 68% of the babies getting cod liver oil and in 76% of the controls. There was no relation between the degree of the rickets and the amount of oil taken. The rickets healed earlier in those that took cod liver oil than in those who did not. She concludes, therefore, that, while cod liver oil does not prevent rickets, it may prevent the development of severe rickets. In the light of these figures, is it reasonable or necessary to give cod liver oil as a routine to all babies? It seems to me that it is not. I can see no justification for giving cod liver oil as a routine measure to breast-fed babies or to those who live in good surroundings and get out of doors as much as the climate and weather will allow. It is time enough to give them cod liver oil if they show clinical signs of rickets more marked than a slight rosary. On the other hand, when babies are being carelessly or improperly fed, when their social status is poor and when they seldom get out of doors, it seems to me advisable to give them cod liver oil from the time they are a few weeks old, even though there are no definite signs of rickets.

Ultraviolet Irradiation

There is not time for me to discuss the physics of light and ultraviolet irradiation. There is no doubt that ultraviolet irradiation cures rickets and spasmophilia and helps those cases of asthma associated with a low blood calcium. It has been assumed by many that, because of its usefulness in these diseases, ultraviolet irradiation will do good in all disturbances of nutrition. They forget that its action in all these cases is due to its effect on the metabolism of calcium. There is no reason to suppose, however, that other nutritive disorders are due to a disturbance of the metabolism of this element. There is no reason to believe that the growth of the higher animals is dependent upon light. It is known that the ultraviolet rays may retard growth. In excess they will kill small animals. Under certain conditions they may do serious harm to plants and seeds. Ultraviolet rays cause a differentiation of tissues. In plants an excess of these rays may cause too early differentiation, and, in consequence, dwarfing. It is evident, therefore, that there are possibilities for haim in the use of ultraviolet irradiation.

The ultraviolet rays penetrate from only 0.1 to 1.0 mm. The shorter, and presumably more active rays, do not even reach the basal layer of the epidermis. Nevertheless, as Greenbaum (Amer. Jour. Dis. Children, 1927, 34, 80) has shown, these rays may, in sensitive persons, cause not only inflammatory or degenerative conditions in the skin, but marked systemic disturbances. It is evident that rays that penetrate so little cannot have much direct action on the blood. The results of studies on the blood after irradiation are inconclusive, the only certain thing being that it causes a temporary lymphocytosis. It probably has no effect on either the red cells or hemoglobin. The rays do

not reach deep enough to kill bacteria. It is claimed that ultraviolet irradiation increases basal metabolism. Fries (Amer. Jour. Dis. Children, 1927, 34, 159 and 166) found that in the majority of children a single treatment causes no change in the basal metabolism, pulse rate, or blood pressure, and that a series of treatments has no effect on the basal metabolism. Mackay's very careful work (Archives of Dis. in Childhood, 1927, 2, 231) showed no objective evidence that light treatment was of benefit to the health of children. There was no improvement in the weight, hemoglobin, or resistance to infection in the children treated over the controls.

There is a certain amount of evidence that ultraviolet irradiation does good in tuberculosis of the lymph nodes, wherever they are situated. My own experience, however, leads me to be somewhat skeptical on this point. Those who feel that it does good must always remember that other things are always done at the same time, the patients are rested, put to bed, given more air and sun and better fed. It must be very difficult to tell, under these circumstances, whether the ultraviolet irradiation is doing good or not.

The fact that adults say that they feel better after a treatment with the ultravoilet lamp is no proof that it does them good. Anyone will feel better for a rest, undressed, lying down in a warm room with the mind at ease. They are still more likely to feel better if they have confidence that they are being helped in some miraculous way. They feel surer of this, moreover, the more they have to pay for the treatment. Finally, those who believe in the efficacy of ultra-violet irradiation in all sorts of conditions claim that "by its action on the nerve endings in the skin, it may reflexly affect the depths." This may or may not be true. No one knows. As an argument, however, it is "bunk". (Anybody who is interested can find a summary of all that is known regarding ultraviolet irradiation in the January 1928 number of "Physiological Reviews").

Whole Milk Mixtures

It is the fashion at present to feed all babies not on the breast on whole milk mixtures. Why is this so? In the first place, because it is the easiest way for the lazy man; in the next place, because it is advised by leading pediatricians and the average doctor prefers someone else to think for him. Doctors follow the leader like sheep and fashion like women. I am willing to admit that many babies do well on whole milk mixtures. Many do not, however, especially young babies. The fact that many babies do well, does not prove that they would not do better on some other food, or that they do not do well in spite of the food rather than because of it. To

my mind, it is not sufficient to say that so many ounces of milk per pound of weight, with enough added carbohydrate to make up the required number of calories, is all that there is to infant feeding. It is necessary to think also of the digestibility of the food and the work which it throws on the system and on the organs of elimination.

Nature provides a food with certain definite relations between the different food elements. The fat is moderately high, the carbohydrate is high, the protein is low and the whole food is dilute. It seems as if this must be the most suitable type of food. In whole milk mixtures the fat is low and the proteins are high. High proteins throw unnecessary work on the organs of elimination. Proteins are an uneconomical source of energy in spite of all that has been said to the contrary. Casein is relatively hard for the average baby to digest. This is the reason why pediatricians nowadays have to boil the milk, add cereal diluents so early and acidify it. It is the reason why they take refuge in dried milks and other foods in which the casein has been rendered more easily digestible by the manufacturing process. If they used a lower protein, they would not have to do these things. Nowadays they seem to have forgotten whey mixtures, peptonization, lime water and citrate of soda. These all have their places, even now. Babies cannot be fed by rule of thumb now, any more than they could be a decade or two ago. Individualization is still necessary to get the best results.

Acidfied Milks

I realize my temerity in discussing acidified milks below the thirty-eighth parallel. I will chance it, however, as Boston is only about 200 miles further than St. Louis from Columbia. There is not time for me to take up the theoretical basis for the acidification of milk in detail. In brief, the acid properties of a solution are due to the number of hydrogen ions and the alkaline properties to the number of hydroxyl ions which it contains. A neutral solution contains 1,000,000,000 each of hydrogen ions and hydroxyl ions. The hydrogen ion concentration is, therefore, spoken of chemically as PH7. Values below this mean that the solution is acid and above it alkaline. Certain substances exert what is known as a buffer action. That is, if acid is added to water containing one of these substances, the hydrogen ion content is but little increased, although if it was not there, it would

It has been found that the average PH at the height of digestion in normal infants fed on human milk is 3.75. Cow's milk contains much more buffer material than human milk. It is chiefly in the form of phosphates and calcium caseinate. Hence, the addition of acid to cow's milk causes a much slighter change in the hydro-

gen ion concentration than it does in human milk, about three times as much being required to bring the PH to 3. or 4. as for human milk. It is evident, therefore, that, if undiluted cow's milk is fed to babies, more hydrochloric acid must be secreted by the stomach to bring the hydrogen ion concentration to 3.75 or it will not be reached. As a matter of fact, the average for normal babies is 5.1.

The idea was, therefore, evolved of adding enough acid to cow's milk to make the hydrogen ion concentration the same as that of human milk and thus to make the digestion of cow's milk easier. This was tried and it apparently worked. Hydrochloric acid, lactic acid, acetic acid, vinegar, orange juice, almost everything but sauerkraut, have been used, all, according to their proponents, most successfully.

There is no doubt that the addition of any form of acid to cow's milk makes the gastric digestion of the protein easier and prevents the formation of large casein curds. These things can, however, be accomplished in other ways. It must be remembered, in this connection, moreover, that, if whole milk and whole milk dilutions are not fed to babies, there is not the same need of measures to prevent the formation of large casein curds. The necessity for the use of these measures is one of the results of this method of feeding. It is not present to the same extent when larger amounts of fat and carbohydrates and smaller amounts of protein are used.

The proponents of the use of acidified milks were apparently, at first, satisfied to get the milk out of the baby's stomach into the duodenum, without regard to what happened to it afterward, to the general metabolism or to the organs of elimination as the result of the added acid. Criticism of the method as a whole and quarrels among themselves as to the best form of acid to use have, however, made them look further. I shall not attempt to discuss or to give a final opinion on all the points which have been brought up. It is evident, however, that the added acid is effective only in the early stage of digestion, because the added acid quickly leaves the stomach with the whey. It is also evident that the extra acid must have some effect on the reaction of the duodenal contents, and, therefore, on the secretion of bile, pancreatic juice and the intestinal juices. Opinions differ as to what the action is and as to whether or not it is beneficial. It is also evident that the added acids have some effect on the acid-base metabolism of the body and that different acids deflect it from the normal in different ways. How great this deflection is is not known, but it certainly throws some doubt on the advisability of the routine use of acidified foods for normal infants. Without taking up any more of these moot points, it is evident that the acidified milks should not be prescribed without a good reason and without the realization that the added acid modifies the normal course of digestion and metabolism in ways which are imperfectly understood and which may or may not be of advantage to the individual infant. I am inclined to think, however that these modifications are relatively unimportant in most cases and that the chief action of the added acid is to make the gastric digestion of the proteins easier by preventing the formation of large, casein curds. If whole milk mixtures are not used, however, the proteins are seldom high enough to cause trouble and there is, therefore, no need to add acids. There are, moreover, many other ways of preventing the formation of large, casein curds, as, for example, by boiling the milk and by the addition of citrate of soda. One method may be better in one instance, another in another. The most suitable should be used. If an acid is used, it is probably better to use an organic rather than an inorganic, as the latter always cause irritation of the kidneys.

Sugars

It is the fashion at present to give all babies either Dextri-Maltose or corn syrup. The explanation of this fashion is that these sugars have been better advertised than the others. Few doctors have, I fear, any definite ideas about the sugars. If they had, they would not follow the fashion so blindly. The sugars used in feeding infants are double sugars. Milk sugar is a combination of dextrose and galactose, cane sugar of dextrose and levulose, malt sugar of dextrose and dextrose. These sugars have to be broken down into their component monosaccharides before they can be absorbed. Dextrose can be utilized at once. Levulose and galactose have to be changed to glycogen and then reconverted to dextrose before they can be utilized. Under certain conditions, when quick utilization is important, malt sugar is, therefore, preferable to milk sugar or cane sugar. Pure maltose, however, is simply a chemical curiosity, the price of which is prohibitive. Under normal conditions, however, milk sugar is preferable to malt sugar, because it is more slowly broken down and absorbed and, therefore, tends to keep up the normal type of intestinal fermentation and, therefore, the normal intestinal bacterial flora. Cane sugar has no advantage over the other sugars, except that it is cheap. As it happens, however, the tolerance of the normal infant for sugar is so great that it can utilize any of these sugars, and, in consequence, it makes little difference which one is used.

Starch is broken down into the various dextrins, then into maltose and finally into dextrose. Dextri-Maltose is simply a combination of the

dextrins and maltose, from 41% to 43% of the former and from 51% to 52% of the latter. Numbers 1, 2 and 3 have practically the same composition, No. 1 containing some ordinary salt, No. 2 no salt and No. 3 bicarbonate of potassium instead of salt. It is evident, therefore, how little difference it makes whether No. 1, 2 or 3 is used. It is also evident that Dextri-Maltose, like the other combinations of maltose and the dextrins, has no specific value. It is simply a derivative of starch, which is finally broken down into dextrose. The composition of corn syrup is not very different from that of the combinations of the dextrins and maltose, except that it is diluted with water. It contains 40% of dextrins, 30% of dextrose, 2% of cane sugar and 28% of water. Its action is the same as that of the combinations of the dextrins and maltose. None of these combinations of the dextrins and maltose are as well adapted to maintain the normal intestinal flora, however, as is milk sugar. On the other hand, when there is fermentation of milk sugar, it is of advantage to use them. They are just as likely, however, to cause fermentation as is milk sugar. When they do, milk sugar is preferable. Nevertheless, as I have said, the tolerance of the normal infant for sugar is so great that it makes little difference when a baby is well, which form of sugar is used.

Green Vegetables

It is the fashion now to give green vegetables to very young babies. The chief arguments advanced for giving them are that the babies need salts, especially iron, and vitamins, which, it is said, it is difficult or impossible for them to get in any other way. Other arguments are that they add bulk to the feces, have a laxative action and considerable food value. It is easy to answer and refute these arguments. There is an abundance of all the salts which a baby needs, except of iron, in milk. There is, moreover, some iron in milk. There is also iron in some of the other foods which babies take; for example, there is 0.1 mg. of iron in a tablespoonful of oatmeal. Few of those who talk most glibly about the necessity of giving green vegetables because of their iron content, know how much iron a baby needs or how much iron there is in the green vegetables which they recommend. Up to six months the daily need of iron is less than 0.5 mg., calculated as Fe. The need during the rest of the first year is 1.5 mg. and during the second year 2.0 mg. A tablespoonful of cooked, strained spinach contains 0.59 mg.; of string beans, 0.3 mg.; and of carrots 0.15 mg. It is evident from these figures that the amount of iron which a baby gets in 1 or 2 teaspoonfuls of these vegetables, even of spinach, is so small that it is of little importance. There are other ways, moreover, of giving iron, and ways which

are less likely to disturb a baby's digestion. One ounce of beef juice, for example, contains 0.2 mg.; 1 level tablespoonful of prune pulp, 0.7 mg.; and the yolk of an egg, 1.4 mg. of iron. It is far easier, therefore, to supply iron to a baby in the form of beef juice, prune pulp and yolk of egg, than it is in the form of vegetables. In my opinion, it is safer to give inorganic iron to babies than to use green vegetables. Vegetables are not necessary to enable them to utilize the inorganic iron, because the pyrrol structures are also present in sufficient amounts in cereals.

Milk contains an abundance of vitamins A and B. It may, however, be deficient in vitamin C, and is certain to be if the milk is boiled. It is much wiser and safer, however, to give vitamin C in fruit juices or tomato juice than in green vegetables. There is very little of the antirachitic factor, or vitamin D, in either vegetables or milk. It is easy, however, to supply this factor by giving cod liver oil or by putting the babies in the sun.

Milk gives more bulk to the feces than do the green vegetables. It is true that the vegetables act as laxatives. Their action is not as certain and as satisfactory, however, as that of the fruits. They are, moreover, more liable to disturb the digestion and may do serious harm.

The food value of the green vegetables is practically nil. That of a pound of spinach is not much over 200 calories. It is evident how little nourishment a baby would get from 1 teaspoonful. Everyone must admit, moreover, that green vegetables and carrots which have passed through the baby undigested and unabsorbed have not nourished it.

It is evident, therefore, that the arguments advanced in favor of giving green vegetables to young babies are unsatisfactory and unconvincing. I object to using them for young babies because I feel that they are liable to upset the digestion and cause diarrhea. It seems to me that they are unnecessary and that the indications for which they are recommended can be better met in other ways.

Bananas

Bananas have recently been recommended as a specific for "coeliac disease." They have been advertised largely in the East by the United Fruit Company. I cannot refrain from wondering at times whether there is any connection between these two facts. This it not the time to discuss "coeliac disease" which, to my mind, is a misnomer and leads to confusion in both diagnosis and treatment. To my mind, it is not an entity and, while it is possible that bananas may be useful in one form of chronic intestinal indigestion, it is just as likely that they may be harmful in others. Bananas contain 1% of fat, 24% of carbohydrate and 2% of protein. The caloric value of the average banana is 115. It is evi-

dent that the food value is due almost entirely to the carbohydrate in the banana. This carbohydrate is in the form of starch. Raw starch is indigestible. An unripe banana, therefore, is no more digestible than a raw potato. Like baked potatoes, baked bananas are digestible. As the banana ripens, the starch changes to sucrose and then to dextrose and levulose. It must be almost rotten before these changes have taken place. It is evident that bananas should not be given until they are very ripe, unless they are baked. Then they are no more valuable than other forms of cooked starch. When very ripe, the sugar which they contain is, of course, easily digestible and absorbable, but no more so than the same sugar in other forms. There is no evident reason why this sugar should be any more valuable in "coeliac disease" than any other sugar. It is probable that the cases which do well on bananas would do equally well if they were given corn syrup or any other easily absorbable sugar.

There are many more vagaries which I might take up, if there was time. Some which might be mentioned are circumcision, inert nose drops, poultices and scented mud in pneumonia, cough mixtures for irritation in the throat and digestive ferments which are destroyed in the stomach for intestinal indigestion. I think, however, that I have said enough. I hope that I have not hurt anyone's feelings or made myself too obnoxious. I also hope that I have not given the impression that I am a chronic grumbler and fault finder. What I have tried to do is to call your attention to the fact that physicians are too ready to follow methods of treatment which are the fashion or which are advised either by the so-called "leaders" of the profession or by travelling salesmen, without due consideration and without using their own intelligence. If I have succeeded, I am satisfied.

SOCIETY REPORTS

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SOCIETY, HELD IN THE DIRECTORS' ROOM OF THE CHAMBER OF COMMERCE, MONDAY, APRIL 2, 1928.

The meeting was called to order at 8:15 P. M. by the President, Dr. Johnston, with the following members present: Drs. Johnston, Hugh Smith, Grimball, Anderson, Mauldin, Davis, Simmons, Edwards, Wyatt, Brown, W. L. Bates, J. W. White, Hearin, Carpenter, Clegg, J. M. Fewell, Ashmore, Pollitzer, McCalla, W. T. Brockman, Tyler, Garrett, Murray, Lyday, James, Evatt and Barksdale.

The minutes of the last meeting were read and approved as read.

Reports of clinical cases were then called for. Dr. Pollitzer reported a case of chorea in a girl, age 6 years. Magnesium sulphate therapy was used in small doses of 1 or 2 cc. of a 25% soln. every other day. The child could not walk, talk, stand or sit, but could walk and talk after three weeks' treatment. Discussed by Dr. Hearin, who mentioned that magnesium sulphate is infinitely better in pre-eclamptics than a 25 or 50% soln. of glucose.

Dr. Grimball reported cases of measles in three generations of people.

Dr. Davis reported a case of pain down the left sciatic nerve which had been diagnosed as gonorrhoea; final diagnosis was that of tuberculous epididymitis, seminal vesiculitis and prostatitis. This patient did not return for further study.

Dr. Johnston then called on Dr. J. F. Simmons who presented a very informing paper on "Pyelitis in Children." The essayist first stated that it is a very common infection commonly overlooked, and that it was first described by Hippocrates as "suppuration of the urinary tract." Pyelitis is rare during the first three months of life, and is more common in girls than in boys.

In older children pyelitis is apt to be associated with renal calculus and pyelonephritis. Pyelitis seems to be most common in summer and is very apparently associated with the infectious diarrhoeas.

Modes of infections: pyelitis is undoubtedly the result of organisms in the bloodstream, while others contend that the infection reaches the pelvis of the kidney by an ascending infection of the urinary tract. One strong point in this argument is the common infection of young girls, due supposedly to the short female urethra. Helmholtz has produced by the injection of or-

ganisms into the blood, also by the production of intra- and peri-urethral infections.

Dr. Simmons then stated that the clinical picture of pyelitis varies according to the microorganism causing the disease and the resistance of the patient. Pyelitis is so often overlooked in children because of manifold symptoms, and diagnosis must be based on the finding of pus cells, hyaline, epithelial and granular casts, bacteria, etc., in the urine. If there is a damming back of pus in the kidney, the initial onset is apt to be characterized by a high temperature which subsides when drainage is established. Acute attacks of pyelitis last only about three weeks if the proper treatment is given. Prognosis: the prognosis of pyelitis is good.

Complications: cystitis, pyelonephritis, pyelonephrosis, and hydronephrosis.

Dr. Simmons stated that there should not be normally more than three white cells per low power field in males and not more than eight for females. It is very necessary to use catheterized specimens for examination in girls. The urine should be cultured and the pathgenic organisms isolated. The blood picture is of little value in making a diagnosis of pyelitis. Proper care by the mother should be insisted upon by the physician as clean diapers and clothing are essential. Infected teeth and tonsils should be removed. Treatment consists of rest in bed, the relieving of pain with hot applications, the drinking of a quart of water every 24 hours, and the use of urinary antiseptics such as urotropin and salol after acidifying the urine. Hexyl-resorcino! has been used with varying results. Bladder irrigation, pelvic lavage and autogenous vaccines may be used with success. Discussed by Drs. Pollitzer, Davis, Grimball. Closed by Dr. Simmons.

Dr. Edwards was then called upon who presented a very valuable paper on the "Status of Intravenous Therapy". The essayist stated that intravenous therapy if carried out properly is of great value, and called attention to the fact that it is a serious operation and should be resorted to only when the medication is of definite known value.

Dr. Edwards summarized the purposes of intravenous therapy as follows:

- 1. To increase circulating blood, e. g. blood transfusion.
 - 2. To alter the osmotic tension of the body.
- 3. When other methods of drug administration do not give the desired results.
 - 4. When speedy results are desired.

- 5. To obviate the destructive action of the drug on the tissues, e. g., salvarsan and arsphenamine.
- When fluid and alkalis are needed at once. Indications and contraindications were then discussed in detail.

The factors to be considered in making an intravenous injection are toxicity, isotonicity, temperature of the fluid, rate of injection, etc. Discussed by Drs. Anderson, Davis, Hugh Smith, Tyler. Closed by Dr. Edwards.

The question of the settlement of Dr. Taylor's hospital bill was then brought up. Dr. Davis moved that the amount already collected to defray this bill be turned over to the Superintendent of the City Hospital and that a receipt in full be requested owing to the fact that physicians are entitled to a 33 1-3 per cent discount; seconded by Dr. W. T. Brockman and carried.

Dr. Tyler moved that the State Medical Assn. be invited to meet here next year; seconded by Dr. Carpenter and carried.

There being no further business the meeting adjourned.

Irving S. Barksdale, M. D., Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY, MARCH 27, 1928, AT 8:30 P. M.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Doctors Allen, A. E. Baker, Jr., Ball, Banov, Beech, Boette, Burn, Cain, Cannon, de Saussure, Chamberlain, Gantt, Jackson, B. K. McInness, McCrady, Maguire, Martin, F. R. Price, Richards, W. M. Rhett, Rutledge, Sanders, J. E. Smith, W. A. Smith, Taft, Townsend, Waring, R. Wilson, (28).

Guests: Dr. J. Adams Hayne, State Health Officer, Columbia, S. C.; Dr. Lanning, U. S. Navy, and others.

The minutes of the meeting of March 13th were read and confirmed.

Dr. Edward Rutledge read a letter which he had received from Dr. Dougal Bissell of New York City, in which he stated that he was sending to this Society a copy of his address which he had delivered before the Society in November, 1927. Dr. Rutledge also presented Dr. Bissell's address, which was typewritten and bound. It was moved, seconded and carried that the Secretary be instructed to write Dr. Bissell and express the Society's appreciation and thanks for this gift.

It was moved, seconded, and carried that the use of the Society's Hall be extended to the Tuberculosis Workers of the State, who would meet in Charleston the early part of next week.

Under Reports of Committees, Dr. Robert Wilson, Chairman of the committee to draw up resolutions on the death of Dr. Eugene L. Jagar, read the following:

Eugene Luther Jagar was born in Chaleston in 1879. His early education was received in the schools of his native city, and after graduating at the Porter Military Academy in 1897 he entered Hobert College, Geneva, N. Y. Here he pursued the classical course leading to the degree of Bachelor of Arts, which was conferred upon him in 1901. These formative college years doubtless exercised an important influence in giving him his broad mental outlook and in developing his keen appreciation of the rich Hellenic culture.

After receiving his degree in medicine in 1905, Dr. Jagar entered upon the practice of his profession which he continued until his death. He was a fine type of the general practitioner, careful and painstaking, without ostentation ministering to the needs of his patients with intelligence and skill, making himself beloved by his genial personality and by his constant willingness to sacrifice himself in their behalf.

Dr. Jagar became a member of the teaching staff of his alma mater in 1908, first as assistant in medicine, and progressing to the position of associate professor of medicine and nervous di-Then the college was reorganized in 1913 and became part of the educational system of the state, he was entrusted with the task of organizing the out-patient department which for the first time was concentrated at the Roper Hospital and was then in a rather chaotic state. To this work he gave himself unsparingly and with never waning enthusiasm, always manifesting an intelligent grasp of the requirements of the department and a just comprehension of the possibilities of its development. His discriminating understanding of character, his infinite tact, his unfailing cheerfulness, his sense of humor and his unoffending badinage enabled him to handle difficult situations with rare skill which contributed in no small degree to the signal success which he achieved. The out-patient department of the Roper Hospital will remain an enduring monument to Dr. Jagar's ability as an organizer.

As a teacher Dr. Jagar succeeded in keeping pace with the rapid march of medical knowledge, and his clinical lectures were clear and comprehensive. His popularity with his students testified to their appreciation of his efforts in their behalf.

He undertook a vast amount of work, but however fatiguing the load may have been his spirit never flagged and he was always ready with a smile and a jest.

We may honor his ability, we may wonder at his boundless energy and his faculty for work, we may envy his genial manner and lovable disposition, but words fail us when we endeavor to express our admiration for the great courage which he manifested in the last months of his life when he was struggling with the disease to which he finally succumbed. He had made the diagnosis of his malady before others suspected it and never entertained a hope of recovery. Notwithstanding, no complaint was ever heard and his thoughtful consideration for others never failed. When suffering most severely his lips still bore their wonted smile and a jesting remark was always ready;

"Death came to him, no conqueror, in the end, He merely smiled to greet another friend." Be it therefore resolved:

That in the death of Dr. Jagar the Medical Society of South Carolina has lost a member whose life and pratice exemplified the finest ideals of our profession; That these resolutions be inscribed in the Minutes, and a copy be sent his family.

R. B. Gantt, Olin B. Chamberlain, Robert Wilson.

These resolutions were adopted by a standing vote.

It was moved, seconded, and carried that at the next meeting of the Society a Vice-President be elected to succeed Dr. Jagar.

Dr. W. M. Rhett, Chairman of the Committee on Public Health and Legislation, read their report on the matter of the Oddie Bill, which had been referred to them at the preceding meeting, recommending that "the Secretary write to our representatives in Congress expressing the opposition of the Society to Bill S1752 and requesting that they use their influence to prevent its passage." It was moved, seconded and carried that this report be adopted.

The Scientific Session was called at 9:00 P. M. Dr. J. A. Ball reported a case of idiopathic pneumothorax. This case had a pleurisy with bloody effusion about two years before.

Dr. F. R. Price reported a similar case, occurring in a healthy adult after cranking an automobile. Dr. R. B. Taft showed X-ray pictures of these cases; they were discussed by Dr. J. H. Cannon and W. A. Smith.

Dr. F. C. Cain reported a case of appendicitis occurring in an aged negress. It was an acute gangrenous case.

· Dr. T. H. Martin reported a case of primary carcinoma of the lung in a man aged sixty-six. Discussed by Drs. Taft and Ball, Dr. Martin closing.

The paper of the evening was read by Dr. Leon Banov, entitled: The City Health Department, Past and Present. In this paper Dr. Banov touched on the history of the development of municipal public health in Charleston and pointed

out the strides that had been made in adopting scientific discoveries to the improvement of the public health of the community. Dr. Banov used graphic charts to show the methods of bookkeeping employed by the Health Department at present.

Dr. James A. Hayne, State Health Officer, who had been invited especially to discuss this paper, in a short address commended the Society, Board of Health, and Dr. Banov for the wonderful progress that had been made in health work in Charleston. He stated that Charleston ranks high in its grading of milk. He lauded the effective way in which the department is being administered at present.

Dr. Edward Rutledge and Dr. Robert Wilson also discussed the paper. Dr. Wilson, who is chairman of the State Board of Health, congratulated Dr. Banov for the splendid showing that is being made in health work in this city. In discussing the early part of Dr. Banov's address, in reference to the history of the department and especially in discussing Dr. Horlbeck, the former health officer, Dr. Wilson pointed out that it was Dr. Horlbeck, who as president of the American Public Health Association, made the suggestion that President McKinley be memorialized to send a commission to Cuba to study the yellow fever situation. Following this suggestion, he was placed upon the committee which presented the matter to the President and resulted in the appointment of the Reed and Carroll Commission, whose work eventuated in the discovery of the mode of transmission of yellow fever. Dr. Banov closed the discussion.

At the conclusion of the scientific session, the President stated that the Society would revert to miscellaneous business, as there were one or two other matters to come up.

The Secretary suggested that this Society invite the South Carolina Medical Association to meet here in 1929. It was moved, seconded, and carried that the delegates be instructed to invite the State Association to meet in Charleston in 1929.

Dr. Banov stated that he had been approached by some members of the American Public Health Association as to whether or not a meeting of this Association in Charleston would be desired. He stated that the Mayor and Chamber of Commerce were behind it. It was moved, seconded and carried that this Society endorse the invitation which is to be extended to the American Public Health Association to meet in Charleston in 1929.

There being no further business, the meeting adjourned.

Approved:

W. Atmar Smith, M. D., Secretary.

RESOLUTIONS ON THE DEATH OF DR. EUGENE LUTHER JAGAR, ADOPTED BY THE MEDICAL SOCIETY OF SOUTH CAROLINA, (CHARLESTON COUNTY) ON MARCH 27, 1928.

Engene Luther Jagar was born in Charleston in 1879. His early education was received in the schools of his native city, and after graduating at the Porter Military Academy in 1827 he entered Hobert College, Geneva, N. Y. Here he pursued the classical course leading to the degree of Bachelor of Arts, which was conferred upon him in 1901. These formative college years doubtless exercised an important influence in giving him his broad mental outlook and in developing his keen appreciation of the rich Hellenic culture.

After receiving his degree in medicine in 1905, Dr. Jagar entered upon the practice of his profession which he continued until his death. He was a fine type of the general practitioner, careful and painstaking, without ostentation ministering to the needs of his patients with intelligence and skill, making himself beloved by his genial personality and by his constant willingness to sacrifice himself in their behalf.

Dr. Jagar became a member of the teaching staff of his alma mater in 1908, first as assistant associate in medicine, and progressing to the position of associate professor of medicine and nervous diseases. When the college was reorganized in 1913 and became a part of the educational system of the state, he was entrusted with the task of organizing the out-patient department which for the first time was concentrated at the Roper Hospital and was then in a rather chaotic state. To this work he gave himself unsparingly and with never waning enthusism, always manifesting an intelligent grasp of the requirements of the department and a just comprehension of the possibilities of its development. His discriminating understanding of character, his infinite tact, his unfailing cheerfulness, his sense of humor and his unoffending badinage enabled him to handle difficult situations with rare skill which contributed in no small degree to the signal success which he achieved. The out-patient department of the Roper Hospital will remain an enduring monument to Dr. Jagar's ability as an organizer.

As a teacher Dr. Jagar succeeded in keeping pace with the rapid march of medical knowledge, and his clinical lectures were clear and comprehensive. His popularity with his students testified to their appreciation of his efforts in their behalf.

He undertook a vast amount of work, but however fatiguing the load may have been his spirit never fagged and he was always ready with a smîle and a jest.

We may honor his ability, we may wonder at his boundless energy and his faculty for work, we may envy his genial manner and lovable disposition, but words fail us when we endeavor to express our admiration for the great courage which he manifested in the last months of his life when he was struggling with the disease to which he finally succumbed. He had made the diagnosis of his malady before other suspected it and never entertained a hope of recovery. Notwithstanding, no complaint was ever heard and his thoughtful consideration for others never failed. When suffering most severely his lips still bore their wonted smile and a jesting remark was always ready;

"Death came to him, no conqueror, in the end He merely smiled to greet another friend." Be it therefore resolved:

That in the death of Dr. Jagar the Medical Society of South Carolina has lost a member whose life and practice exemplified the finest ideals of our profession; that these resolutions be inscribed in the Minutes, and a copy be sent his family.

R. B. Gantt, Olin B. Chamberlain, Robert Wilson.

PROCEEDINGS AT THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, APRIL 10, 1928, AT 8:30 O'CLOCK.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Drs. Allen, A. E. Baker, Jr., B. R. Baker, Ball, Banov, Beach, Boette, Buist, Burn, Cannon, Cathcart, de Saussure, Finger, Gantt, Heidt, Jackson, F. B. Johnson, W. H. Johnson, Kollock, LaRoche, Lynch, B. K. McInnes, McCrady, Maguire, Martin, Mitchell, Mood, Pearlstine, Plowden, F. R. Price, Ravenel, Richards, Rhame, W. M. Rhett, Rutledge, Scott, W. A. Smith, Taft, Townsend, Walsh, Waring, Wellbrock, I. R. Wilson, L. A. Wilson, R. Wilson, Prioleau. (46).

Guests: Dr. T. F. D. Griffith, United States Public Health Service; Dr. Harry S. Mustard, Mufreesboro, Tennessee; Dr. R. M. Potlizer, Greenville, Dr. J. Warren White, Greenville.

The minutes of the meeting of March 27th were read and confirmed.

The Secretary read a letter from Mayor Thomas P. Stoney, stating that he had extended an invitation to the South Carolina Medical Association to meet in Charleston in April, 1929.

Under miscellaneous business, the President stated that a motion had been passed at the previous meeting, providing for the election of a Vice-President to succeed the late Dr. Eugene L. Jagar. He then called for nominations. Dr. J.

Walter Burn was nominated. This was seconded. It was moved, seconded and carried that the chair cast the unanimous vote of the Society for Dr. Burn. Dr. Burn was then brought forward by a special committee appointed by the President, and made a brief address expressing his appreciation of the honor that had been bestowed upon him.

At nine o'clock the Scientific Program was called.

The President requested Dr. William Henry Johnson to introduce the speaker of the evening, Dr. J. Warren White of the Shrine Hospital, of Greenville, S. C. Dr. White read a paper on Orthopedic Objectives, and illustrated his address with moving pictures. At Dr. White's request, the paper was generally discussed and many important points on orthopedics brought out.

There being no further business, the meeting adjourned.

W. Atmar Smith, M. D., Secretary.

RESOLUTIONS ON THE DEATH OF DR. W. J. CHAPMAN

Dr. William Jackson Chapman of Inman, S. C., a graduate of Atlanta Medical College, a member of the S. C. Medical Association, and the Spartanburg County Medical Society, and a former President of the latter died at his home March 1st, 1928, aged 74.

Whereas: We the members of the Spartanburg County Medical Society would place on record some testimonial of our appreciation of the life and work of Dr. Chapman, and the esteem in which he was held by his fellow practitioners, and

Whereas: We are also cognizant of the interest which he displayed in many activities for the public welfare, and his value as a citizen, therefore be it resolved,

First: That in his death we have lost one of our earnest and zealous members, and our state one of its loyal citizens.

Second: That Dr. Chapman exemplified in his daily life and work the highest ideals of his calling, his patients receiving at his hands skillful

attention administered with kindness, and faithfulness.

He seldom took vacations, and continued in active work to within a few weeks of his death. His contributions to elemosynary institutions were liberal, and many bear witness to his personal acts of charity. He heeded the call of the poor as well as the rich, and served both in full measure. Recognizing the obligation of the Physician in the truest sense, he found his greatest pleasure, and rendered his best service to humanity in the duties of his Profession.

Third: That a page in our minute book be inscribed to his memory, that a copy of these resolutions be sent to the family, and additional copies to the Journal S. C. Medical Association, and the local newspapers for publication.

Geo. E. Thompson, Chairman. J. L. Jefferies, J. J. Lindsay.

Committee.

LAURENS COUNTY

Dr. John Wesley Young, age 84, died at his residence, Clinton, S. C., on May 2, from a stroke of apoplexy.

He maintained remarkable health up to a few days before his death.

He was born near Florence, also raised there, and volunteered in the army in the War between the States and served four years during the entire war from 1861 to 1865. After the war he graduated from the Georgia University Medical Department in 1872 and came to Clinton, S. C., to practice his profession and remained here since that time. He was a man of sterling worth and character, and was a successful general practitioner. He was a grand old type of the faithful family physician. He was engaged in active practice for forty six years.

He was interred in his family plot in the Clinton Cemetery on May 3, with a large concourse of friends attending.

T. L. W. Bailey, M. D.

ANDERSON COUNTY

The meeting of the Anderson County Medical Society was held May 9, 1928, at the Library Building, Anderson, S. C. The president, H. B. Williams was in the chair.

Mrs. Edith Dickson, Public Health nurse in charge of the Anderson County Tuberculosis Association was introduced to the society. Mrs. Dickinson made a few remarks stating she would be glad to cooperate with the doctors in helping to prepare applications for the sanatorium and visit cases when it was requested.

Dr. J. B. Townsend, one of the delegates to the State Medical Meeting, gave his report.

A motion was passed by the society authorizing the treasurer to pay the cost of a float not to exceed \$75.00, for the Anderson County Hospital. It was further decided to pay the cost of this float, in place of having the usual annual picnic of the society.

The scientific program was presented. Dr. Thomas R. Gaines read a paper on "Recurring Head Colds," which was freely discussed by all members of the society.

Dr. Frank Wrenn read a very interesting paper on roentgentherapy. This paper was also discussed.

Luncheon was served by the Mother's Club.

Members present, 18; visitors, 1. E. E. Epting, M. D., Secretary.

SOUTH CAROLINA SOCIETY OF OPTHALMOLOGY AND OTO-LARYNGOLOGY

The South Carolina Society of Ophthalmology and Oto-laryngology held its business meeting at the Jefferson Hotel, Columbia, S. C., April 18, 1928. There were twenty-five members present. The officers elected for the coming year were:

President: Dr. Clarence Kibler, Columbia, S. C.

Vice-President: Dr. George Truluck, Orangeburg, S. C.

Secretary-Treasurer: Dr. Walter Bristow, Columbia, S. C.

The Society unanimously endorsed the following resolution: That the Suth Carolina Society of Opthalmology and Oto-laryngology go on record as advocating that operations in this specialty be performed only in recognized hospitals or institutions, and that we disapprove of the school house clinics as now being done or have been done in the past.

Walter Bristow, Sec.-Treas.

- NEWS ITEMS

The Medical Association of Georgia is arranging for special Pullmans to the A. M. A. at Minneapolis and are extending invitations to the physicians of the Carolinas and Florida to join them. This train will leave Atlanta, Saturday, June 9, at six fifty two p. m. and will arrive in Minneapolis early the following Monday morning. Tickets may be secured routed via Rochester either going or coming. Tourists rates will be in effect at that time and also the fare and one half rates. Each have their advantages and disadvantages. The Tourist tickets cost a little more but permit stop overs anywhere. This arrangement for the trip to the A. M. A. offers an unusual opportunity for an acquaintance with fellow physicians in the Southeastern States mutually agreeable and profitable. Reservations may be made through Dr. A. H. Bunce, Secretary of the Medical Association of Georgia, Atlanta, Ga., or through the Journal.

The second Post Graduate Course at the Medical College of the State of South Carolina will begin May 28th and run to June 9th. Circulars are now being sent out by the College giving the details of the various lectures and clinics. Special stress will be given to internal medicine, pediatrics, surgical diagnosis, and

obstetrics. The laboratories including x-ray will be open for instruction. The classes in physical diagnosis will be a special feature. Every effort has been made to arrange the instruction along the lines of practical usefulness to the members of the State Medical Association. There will be no charge. Return postcards have been sent out by the Secretary of the State Medical Association announcing the course. Members should mail these into the College at once in order that the authorities there may know well in advance the number of physicians to expect.

The special departments of the Journal had to be omitted this month owing to space being taken up by the addresses of the President and invited guests. The Council reelected all of the Associate Editors at the meeting held in Columbia and commended them for the excellent way in which the Departments have been conducted.

The total contributions to the Sim's Memorial up to May 12, 1928, amounted to \$3,150.89. It is desired that contributions subscribed be sent in promptly in order that arrangements for the Memorial be completed at an early date.

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Broken Dreams: An Ether Experience, by R. W. G., M. D. Columbia, S. C. _____ Changes Occurring n the Thyroid of the Exopthalmic Goiter after Iodinization, by Samuel Orr Black, A. B., M. D., F. A. C. S., Spartanburg, S. C. Pathology and the General Practitioner, by H. H. Plowden, M. D., Charleston, S. C. _____ EYE, EAR, NOSE AND THROAT DEPARTMENT _____ SOCIETY REPORTS . WOMAN'S AUXILIARY NEWS ITEMS BOOK REVIEWS

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EDITORIAL

MEDICAL COLLEGE GETS NUTRITION LABORATORY

The Dean of the Medical College of the State of South Carolina, has announced that Dr. Roe E. Remington has been elected chemist for the state food analysis commission. The last legislature appropriated fifteen thousand dollars for this purpose. Dr. William Weston of Columbia is the Chairman of the Commission and has labored in season and out of season to bring before the profession and the public the great importance of this work. The attention of the world is being focused on South Carolina as a result of Dr. Weston's activities. It is fortunate that the Medical College has been selected as an institution in which the experiments will be conducted. Here in an atmosphere of learning surrounded by virile minds and an ever enlarging faculty and student body the laboratory starts with a very promising future. Professor Remington has been elected to the faculty and will be an inspiring addition to that distinguished body of teachers as well as to the students themselves. Hitherto these investigations have been pursued as a rule in large centers and often in isolated laboratories apart from the actual teaching faculties of medical students.

The whole question of nutrition must necessarily concern the future medical man tremendously. A multitude of diseases center about this problem of proper nutrition too numerous to mention here. While it may be one of the chief points of attack on the part of the laboratory in our State as regards the goiter incidence or non-incidence this is a minor consideration compared to the broad subject of food analysis. It is indeed a fascinating ideal toward which the commission is headed. We wish to offer every encouragement to this new enterprise in South Carolina. We urge the members of the South Carolina Medical Association and all other intelligent thinkers and workers to cooperate in this splendid new field of endeavor.

ORIGINAL ARTICLES

BROKEN DREAMS: AN ETHER EXPERIENCE

By R. W. G., M. D., Columbia, S. C.

My last conscious thought as the mingled waves of gas and ether surged through my mind and body, strange to say, was not of my tender wife from whom I had just parted, nor of the miracle of a world clothed in springtime raiment, nor of the magic of friendly sunbeams that gleamed and glittered through the window-panes of the operating room, but of a fragile little boy and of what he said on an occasion more than twenty years ago. The boy lived in the Granby Mills village and he was eight years old. While stealing a ride on a wagon, as little boys were wont to do in those remote days, one leg was caught between the spokes of the revolving wheel and a ghastly compound fracture was the result. On the morning after the operation with the assistance of Billie Boyd I was dressing the wound. I see now the color and the pathos of the scene. It was a July day and the hot air struggled to get in through the windows and doors of the humble home in which we were at work. But curious neighbors had crowded the room as was their way in those days when misfortune came to their fellows, and those who could not get within gazed through the unscreened openings, thereby appropriating for themselves the oxygen needed by the boy and ourselves.

The Methodist pastor sat at the bedside, solemn and sympathetic as pastors are, but otherwise useless and in the way. That was a brave little lad. As we removed yards of blood-stained gauze from the wound l observed that his face had become chalky but in every feature were courage and a strange defiance. A combative button of a chin gave a hint of his determination to endure. His eyes roving about the room were snapping with indignant fire. For a while he said not a word and not even a groan gave evidence of his agony. Finally, in tones that all could hear, he said:

"Doctor, kin I cuss?" I replied encouragingly, "Yes, my little man, fire away." Then with eyes that blazed a baleful and a deeper indignation, he said: "G-d-n everybody, 'cep'in' you and Dr. Boyd." As the anaesthetic tingled through me I vividly recalled our commendation of his words and of the exodus that followed them. Now why, at such a moment, when my conscious mind was all but submerged, should memories steal into it of that episode which occurred far back in the days of my youth? What subtle, mighty power of the inner consciousness had conjured them up and given them swift and vivid life? Surely when the mask was pressed down on my face I thought unkindly of no one. Only friends were there. I had no resentment towards the incidents of life "whose journey," as I know, "is but a day." And never was I more tranquil in spirit and never more unafraid. In fact, I had the promise of a certain sort of freedom, and was sure for a time of a remoteness from the fretful stir and the fever of the world. But in the brief ether consciousness one is in a strange world, a world of forgotten and unreal things. It is a topsy-turvy world in which fantastic thoughts and wierd happenings follow one another with amazing swiftness and vividness. Bizarre episodes and adventures end with their beginning. Throngs of broken, brilliant images struggle for expression, but they too end as they begin. Of the first stage of either I may say as did DeQuincey of his indispensable opium: "Thou hast the keys of Paradise, O just, subtle, and mighty." And this reminds me here of another worshiper of "mighty opium"there comes to mind Coleridge's "Kubla Khan" that noble fragment of a narcotic dream. But for the vanishment of that dream literature would have had a greater enrichment in a finished masterpiece. And yet, we are thankful for fragments. They have given an added splendor to all the arts.

This dream consciousness of which I speak comes without conscious effort and without

sensation. Its phantasms pass away like those vagrant images one sees on the surface of a stream into which a stone has been cast. In one brief moment one may have a thousand dreams, all wierd, shapeless—clipped. The fragments pass through the mind with incredible speed. At the time and afterwards one wonders at their amazing number, their perfect clarity. What calls them up? What takes place in the dream consciousness that causes such queer mental dissociation, such a curiously incomplete severance of thought continuity? These phantasms seem as voiceless semblances of the gibberish uttered by the disembodied spirits of which Sir Conan Doyle and Sir Oliver Lodge speak so insistently. One of these fragments lingers vividly in my mind. It seemed that the corporal part of me was being borne on bouyant pinions through the limitless ether, far beyond the infinity of blue. Just as I had begun to feel that I had been sent out into space for the express purpose of testing the

verity of the Einstein Theory and was struggling with all my might to say "Q. E. D.," suddenly I began to fall with unheard of velocity-And still I was unafraid, for 1 held tight in my hand the "Keys of Paradise" and then an odor made itself known to me. not of the paralyzing anaesthetic, nor of fumes from autos on the nearby street-but of the earliest spring flowers of a real and beautiful world. And then a hand soft as a falling petal toucher my brow. I dimly saw bending over me a young woman clothed in the color that angels are said to affect, but in raiment more efficient. Looking into mine were brown eves soft and humid with human compassion. I was also aware of a little circle of samaritans, an overplus of them as I swiftly thought of my own merit-and then into a true oblivion, "Nature's sweet restorer, balmy sleep," where there were no ether waves, no speed records to break, no raucus cacacophonies of auto horns—and no broken dreams.

CHANGES OCCURRING IN THE THY-ROID OF THE EXOPTHALMIC GOITER AFTER IODINIZATION*

By Samuel Orr Black, A. B., M. D., F. A. C. S., Spartanburg, S. C.

Though it was not till 1895 that Bauman discovered iodine to be a normal constituent of the thyroid gland, yet it had been used in one or another of its forms, for the treatment of goiter, by the different people inhabiting the earth for as far back as a thousand years prior to the birth of our Savior.

There have been three different periods in the world's history when medical men have used iodine more or less extensively. First, the ancients, who prescribed bits of sponges or seaweed. Second, the French who in the middle of the 19th century used the ointment locally and administered the powder with the food, and third, we of the present age, especially in the past three years.

The reason for the fluctuating popularity of this great drug in the treatment of goiter was due, not to inferior qualities or variation in dosage, but solely to the profession's fail-

*Read before the South Carolina Medical Association, Columbia, S. C., April 18, 1928.

ure to differentiate between the types of goiter.

Thus it was, in that far off distant past, that one physician would prescribe it with the most brilliant and gratifying results, whereas his contemporary using perhaps the same quantity but in a different type of case would see no improvement, but indeed at times was led to believe that the drug even aggravated the symptoms.

The reason for the above is that iodine is not suitable for all types of goiter.

In children with hypertrophied thyroids, the gland will subside in size following its administration. In the colloid goiter of adolescence and maturity, as a rule, it has no appreciable effect. In non-toxic and adenomatous and cystic goiters it is of no consequence. In the toxic adenoma with no hyperplasia, it is practically contra-indicated, whereas in the toxic adenoma with areas of hyperplasia scattered here and there through the gland, it is a useful drug if used with caution and frequent observation. In the true hyperplastic goiter, that is the exopthalmic type, it is the drug par excellence.

It will not cure, though it will materially lessen the size of the gland, diminish the ner-

vousness, reduce the metabolic rate, slow the pulse, check the nausea, stop the vomiting if present, and serves to act as the best preparative treatment for operation that we have.

The pathological picture of the hyperplastic gland has been well known for fifteen years or more.

The gland is slightly larger, usually smooth, and appears beefy on section. It is more vascular, there is an increase in the stroma as well as an increase in the number of cells lining the acini, though this increase varies in number both in different parts of the same gland and in different glands. There is a transition in type from cuboidal to columnar in the epithelial cells lining the acini. There is a marked decrease in the amount of colloid material in the acini. Scattered throughout the gland are many lymphocytic cells which occasionally are arranged in mass like formation.

The amount of colloid in the acini varies directly with the severity of the toxemia. When the patient is on the down curve of the wave, in an exacerbation, the colloid content is low, in fact, in many instances absent. After improvement sets in and the toxemia begins to subside, the patient takes on weight and strength, the amount of colloid correspondingly increases.

As the colloid increases, the increase in stroma and in cells, that is, the hyperplasia itself, decreases.

In 1926 there came to us some of the worst cases of exopthalmic goiter that we have seen. These were hospitalized and given iodine, sedatives and fluids, in first one proportion and then another. The patients got better. Later they were operated and recovered.

The changes which occurred in these individuals were remarkable. The stare of the protruding eyes was lessened. The glands reduced in size, in several instances so much so as to be almost invisible. The thrill disappeared, the supra polar bruit vanished. The appetite returned, all gastric disappeared; the nausea and vomiting ceased as did the diarrhea and the patients promptly began to gain weight.

In an almost unbelievable short time they were out of bed and about in their rooms and

out in the halls of the hospital. The blood pressure dropped, the pulse rate and the pulse pressure were lowered and the metabolic test in each instance showed a lowered figure.

I became so interested in the remarkable picture which came to pass that later on I wrote Broders and asked him for a reprint containing the microscopic changes in the exopthalmic gland which had been iodized. He replied that he had no reprints pertaining to this subject and that his observations had not then been published.

I now find that Reinhoff, the year before in the Bulletin of Johns-Flopkins Flospital, as well as Cattell, in the Boston Medical and Surgical Journal published their observations in regards to the changes noted after iodinization.

Recently Sager has written in the Archives of Surgery a most comprehensive article on the subject.

The changes which take place are first, those occurring in the acini themselves and second those in the stroma.

In the acini the most noticeable change is the increase in the amount of colloid. It may be so increased as to closely resemble the picture of a mature colloid goiter, though the colloid itself stains lighter and it does not have the number of vacuolated areas that the untreated gland has.

As the colloid increases, the hyperplasia in the parenchyma decreases. This was first demonstrated by Marine. He also showed that as the colloid increases there is a change back to the normal in the epithelial cells lining the acini, the columnar revert to the cuboidal, thus decreasing the hypertrophy as well as the hyperplasia.

In the stroma there appears to be less connective tissue. This is by no means certain however, for as the colloid increases and the acini swells, it is possible that pressure plays no little part in packing the connective tissue into less space by simple pressure.

The blood vessels seem smaller, though this cannot be proven. In the capillaries there is an apparent decrease in caliber, and as this is present there must be a concomitant decrease in the amount of blood in the gland.

There is no apparent change in the number

or distribution of the lymphocytic cells in the stroma.

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PATHOLOGY AND THE GENERAL PRACTITIONER*

By H. H. Plowden, M. D.

Asst. Professor of Pathology, Medical College of the State of South Carolina

In the early days of medicine, the clinician knew all there was to know about pathological processes. As time passed, and greater opportunities for increased knowledge of disease arose as a result of post-mortem examinations and other laboratory procedures, some individual was kept busy studying the material and the technic associated with such opportunities and had no time for association with the clinical side of medicine. Thus was born the Pathologist. The clinician, or general practitioner, devoted his time to the living patient, dealing largely with signs, symptoms, histories, and treatment.

From this early divorce of clinicians from direct contact with pathological material, there resulted a stagnation of interest in things of prime importance to him. On the other hand, the pathologist had so busied himself with the study of pathology, in its various attributes, that he forgot the urgent need for a well developed clinical sense. This breach between the practitioner and the pathologist has grown wider as time passed so that now, or in the recent past, the practitioner has become increasingly aware of a growing need for closer

*Read before the Eastern Carolina Medical Association, Dillon, S. C., March 10, 1928.

association with pathology. Likewise, the pathologist has felt the lack of something in his rounding out process and is awakening to the proper consideration of clinical medicine.

The two subjects, pathology and practice of medicine are so essential, one to the other, and so a part of each other, that more than due consideration of one, or the other, immediately throws one out of professional balance. Consideration of one, to the exclusion of the other establishes a bias with a resulting distortion of perspective. Because of the very closeness and devotion to one subject, its compelling shadow hides or obscures the other, to the loss of the individual concerned. Over emphasis, on the one hand, and lack of it, on the other, are equally detrimental and both are to be rigorously avoided if one aspires to that final haven in medicine—The Perfect Practitioner.

There is a common ground on which practitioner and pathologist may tread with equal benefit. The autopsy is the place to learn pathology and, hence, medicine. There is but little doubt that the general practitioner of medicine today is casting aside his greatest opportunity for scientific learning and achievement by recklessly passing over this one great method of scientific investigation. An awakening of scientific interest in postmortems is the brightest hope of the medical profession today. This awakening is slowly taking place through the gentle urging of some of our national medical organizations.

The autopsy, and the material obtained from it, furnishes the scientific basis on which rests the whole structure of scientific medicine. Without it, diagnosis would be impossible. Treatment would be empirical, and our understanding of signs, symptoms, and other manifestations of disease would be impossible. Lynch,1 in a recent article, said "Show me the country, the city, the school, where the autopsy holds the highest regard of the medical profession and I will show you the place of greatest development and of leadership in scientific medicine of the day." Smith² believes, and rightly, that the autopsy furnishes the most valuable means of postgraduate study available and that we practically do not use it at all. Some

of the greatest men of medicine believed in the autopsy as the source of the most valuable teaching. Sir William Osler said he never missed an autopsy. Virchow, the father of pathology, spent the greater part of his life doing autopsies and in studying the material from them. Rokitansky likewise spent the greater part of his life in this work and there are many others who have done this also. Dr. Louis B. Wilson doubts very much whether an internist can average a high degree of efficiency without a high percentage of autopsies on his cases.

There is still another factor which points out the line of thought in regard to the usefulness of autopsies. In certain of the best known hospitals and clinics of this country where their reputations are founded on scientific achievement, we find that they perform from 65 to 91% of autopsies on private patients dying there. There is, of course, a very definite relationship between their efficiency and their autopsy percentage.

There are some practitioners, in general practice, who obtain 50%, and more, autopsies on their private cases. These men are unfortunately, fewer in number than they should be. But why are they not plentiful? There is no sound reason why every practioner should not do some autopsies on his private cases and profit immensely by it. A number of men over the country obtain permission for, and do, their autopsies. This of course, shows that permission can be obtained despite the very general belief to the contrary. Many men honestly believe that it is not possible to obtain permission for autopsies on private cases in their practice. If these same men will make a diligent and intelligent effort to obtain them, using tact and persuasion, they may be surprised at the result. And just as surely as the autopsy percentage in hospitals is now being accepted as an index of their efficiency, just so surely will the time come when the practitioner's efficiency will be measured in the same manner. One of the healthiest signs of the times is shown in a certain South Carolina city where, among the profession itself there have been a number of deaths recently, there were ante-mortom requests for autopsies

by the patients themselves. These patients, professional men, had been taught the value of postmortems and were willing, as a last gesture, to assist their associates in the search for scientific truth.

Many practitioners feel that their knowledge of autopsy technic and gross pathology is too meagre to attempt such work. This, I believe, is a feeling founded, not on fact, but rather on inexperience. Of course, wide experience is necessary to perform a good autopsy and to distinguish all the gross lesions and to link them all together in one pathological whole. But much information can be gotten without the skill necessary to perform a complete autopsy. There are, I believe, very few men who cannot recognize a frank pneumonia, an organic heart lesion, a ruptured aneurysm, a tumor, a cerebral hemorrhage or area of softening, an acute peritonitis, a typhoid fever, or a pulmonary tuberculosis. And certainly, if you watch a case of typhoid fever for instance, over a week or two, and follow it up with an autopsy after death to find it a case of acute tuberculosis, vou will benefit tremendously from the discovery of your error and will be much less likely to fall into the same error again. To discover your errors is no reflection on you. Rather, it is the open road to future professional achievement.

Finally, the scientific performance of autopsies has very recently become a matter of such importance in the United States that the Council on Medical Education and Hospitals of the American Medical Association has adopted a ruling that, after Jan. 1, 1928, hospitals for the training of internes must do at lease 10% of autopsies on their patients dving there or otherwise they will not be allowed on the approved list.3 lt is expected. I believe, that with the passage of years this requirement of 10% will be raised to a much higher one. This regulation, applicable to the approved hospital for interne training is merely an indication of the trend of thought toward the increasing importance of pathological knowledge. To know less is to regress, but to strive and struggle for the truth in a matter is to progress and win favor and, possibly, fame.

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EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

The Eye, Ear, Nose and Throat Monthly, for April, 1928. A Decade in the Speciality of Opthalmology and Otolaryngology; B. W. Egan, M. D.

Dr. B. W. Egan in the Eye, Ear, Nose and Throat Monthly writes an article on a Decade in the Specialty of Opthalmology and Otolaryngology. The opening paragraph of his paper showed the superficial statue of that specialty a decade ago and by a review of the work and attitude of the doctors in some of the big foreign clinics contrasts it with our knowledge on the subject now. For instance, a good old family doctor of New York ten years ago said "All you have to know about the eye is how to fit glasses; all you need know about nose and throat is how to take out tonsils, and as for the ear, nobody knows anything about the ears anyway." Contrasted with that is Prof. Alexander's opinion that an ear man must know everything. For one who knows the ear and its relationship that is to some extent true.

From refraction of the eye we have advanced to the minutest detail of the anatomy and pathology of the eye, its intimate connections with the brain and be able to diagnose from them, we must know its relation with other structures, and their effect upon the eye, focal infection, (systemic toxemias as of pregnancy and nephritis, arteriosclerosis, anemias) so that Alexander's statement applies also to the eye.

In Vienna they use 20% Cocain on the cornea, the last instillation in cataract operation is always 20%. (This is in contrast to the theory that Cocain is essentially harmful to corneal epithelium, especially, and consequently should be avoided as much as possible).

And the patient gets off the table after cataract operation and walks to his room, be that where it may.

They do not dilate the pupil before removing the cataract and use a small peripheral iridectomy and eserine afterwards, not beginning the atropine for twenty-four hours or later.

If they can reduce the ocular tension in 48 hours to 20 or 15, they do their glaucoma iridectomy which consists in tearing a portion of the iris body from its root. They do not favor Elliot Trephine on account of late infection.

They have discarded adrenalin in glaucoma as uncertain and dangerous.

And they are very enthusiastic regarding milk injections, relying on them more than all other measures combined in all infections of the eye (a method of treatment I have advocated in Charleston for years).

With regard to Maxillary sinus infection, I like their attitude which is to wash out for a few times and if that does not relieve the infection, open the sinus, but I use an operation not as formidable as theirs.

With regard to Ethmoid surgery, they are very conservative. Out of 18,000 cases treated there in a year, they do only seven, or at the most, ten ethmoids radically operated on. Halle says "Treat, treat, treat and wait long unless an extreme emergency exists, before operating."

As to ear work, there is not any great difference in the handling and treating of cases, except with reference to the labyrinth. Meumann operates on all labyrinths as soon as they are dead and Alexander operated when

intracranial complications show their earliest symptoms. Out of 14,000 simple mastoids they did but forty radicals.

Fuchs thinks the etiology of glaucoma will be found in the vitreous.

Cuist believes that sympathetic opthalmia is an anaphylactic reaction (which is a view held by a large following). With regard to malignancy of the larynx, first radium is but of little value and is rather harmful. Second, if intrinsic, early operation is of real value. Third, if entrinsic even total extirpation with affected glands will not help.

This review gives a somewhat different view of some of our problems.

SOCIETY REPORTS

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, MAY 8, 1928, AT 8:30 O'CLOCK.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Doctors A. E. Baker, Jr., B. R. Baker, Ball, Beach, Beckman, Buist, Burn, Cain, Cannan, Cathcart, de Saussure, Gantt, Heidt, Jackson, F. B. Johnson, W. H. Johnson, Lynch, McCrady, Mood, Pearlstine, Prentiss, F. R. Price, Revenel, Richards, Rhame, W. M. Rhett, Rutledge, Sanders, Scharlock, S. Simons, W. A. Smith, Taft, Townsend, Waring, Wild, Prioleau. (36).

Guests: Dr. W. A. Frontz, of John Hopkins University, Baltimore; Dr. Theron Kelley, Kingstree; Milton Weinberg, Sumter; Dr. Winter, Dr. Leonard Ravenel and Dr. O. T. Finklea, of Florence; Dr. S. P. Thackston, Orangeburg; and Dr. M. H. Wyman, Columbia.

The minutes of the meeing of April 24th were read and confirmed.

The Secretary read a letter from Dr. C. E. Williams, Superintendent of the State Hospital for the Insane, in which he stated that in the near future he would send one of the physicians connected with the State Hospital to look into the matter of holding adult mental clinics in Charleston.

A letter from Mr. F. O. Bates, Superintendent of the Hospital, was read, calling attention to Hospital Day, and inviting the members of the Society to be present and act as hosts on that occasion. These letters were received as information.

The Secretary announced, at the request of Dr. T. E. Bowers, Secretary of the District Medlcal Association, that the first District Association meeting would be held in Summerville on the afternoon of May 10th.

It was moved, seconded and carried that the use of the Society hall be extended to the Medical College during the Post Graduate Course.

Dr. M. W. Beach brought up the matter of the proposed bill which is now in the United States Senate, in regard to increasing the narcotic license tax. This matter received some discussion, and the following motion, made by Dr. Beach, was passed; that the Secretary wire the senators from South Carolina and the congressman from this district, protesting against the increase in the narcotic tax, and urging the prevention of its passage.

It was also moved, seconded and carried that the Secretary wire these officials calling attention to the resolution passed by this Society, and having two or three members sign these telegrams.

The Scientific Program was called at nine p. m.

The President requested Dr. J. J. Ravenel to introduce Dr. W. A. Frontz, of Johns Hopkins University, Baltimore, to the Society. Dr. Ravenel in an appropriate manner presented the guest of the evening. The subject of Dr. Frontz's paper was as follows: "A Consideration of the Factors Responsible for Urinary Obstruction, and the Lesions of the Upper Urinary Tract Resulting Therefrom." This was illustrated by lantern slides. At the conclusion of his presentation, Dr. Frontz requested that his paper be discussed by the Society. The President then ex-

cussed by the following: Doctors W. A. Smith, M. H. Wyman, of Columbia; J. J. Ravenel, Leonard Ravenel, of Florence; Weinberg, of Sumter; Prioleau, and Thackston of Orangeburg; Dr. Frontz closing.

At the conclusion of the business, the Society

tended the privileges of the floor to the invited guests who were present. The paper was dis-

At the conclusion of the business, the Society adjourned, to partake of a light collation.

W. Atmar Smith, Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, APRIL 24, 1928, AT 8:30 P. M.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Allen, Ball, Banov, Beach, Bowers, Burn, Byrnes, Cain, de Saussure, Finger, Gamble, Jackson, F. B. Johnson, Kollock, Lynch, McCrady, Maguire, Martin, Mitchell, Mood, O'Driscoll, Plowden, Prentiss, F. R. Price, Richards, Rhame, W. P. Rhett, W. M. Rhett, Rutledge, Sanders, Scott, S. Simons, W. A. Smith, Taft, Waring, I. R. Wilson, L. A. Wilson, R. Wilson, Prioleau. (39).

Guests: Internes and Medical Students.

The minutes of the meeting of April 10th were read and confirmed.

Under unfinished business, the Chair read the following resolution, which had been adopted at a previous meeting:

AND FURTHER, BE IT RESOLVED, That the Medical Society of South Carolina shall have appointed annually by its President, a committee of three, whose duty it shall be to review and report upon any expert medical testimony given before a trial court in this County, whenever requested by the Society to do so.

The following committee was appointed: Doctors R. Wilson, R. S. Cathcart, and K. M. Lynch.

Dr. J. I. Waring brought up the matter of inviting the Superintendent of the State Hospital for the Insane to hold clinics in Charleston for adults suffering with mental diseases. It was moved by Dr. Robert Wilson, seconded and carried that this Society request Dr. C. F. Williams, Superintendent of the State Hospital, to include Charleston among the places where mental clinics for adults are held.

Dr. K. M. Lynch, Chairman of the Delegation of this Society, made the following report:

The delegation attending the meeting of the House of Delegates of the State Medical Association begs to report the splendid success of the Annual Convention at Columbia, April 17-19, the attendance being the largest yet recorded.

The two matters in which the delegation was instructed, i.e., the presentation of the bill to regulate expert medical testimony and the invitation to meet in Charleston in 1929, were duly attended to, both being accepted by the House of Delegates by unanimous vote, the latter in spite of invitations from Greenville and Columbia. Other important reports and recommendations were presented to the House of Delegates, very few of which, however, were adopted. Little business other than the election of officers was transacted. One measure, relating to the renewal of licenses by physicians every five years, lost by

all but one or two votes. Certain accusations made against the Secretary of The State Board of Medical Examiners by the President and others failed to prevent the reelection of Dr. A. Earle Boozer and Dr. Dibble to the Board. Dr. S. E. Harmon was reelected to the Council over Dr. J. H. Taylor, Dr. J. H. Cannon was reelected Delegate to the American Medical Association. The entire Executive Committee of the State Board of Health were nominated for reelection by acclamation. Dr. Rolfe E. Hughes, of Laurens, was elected President without opposition, Dr. Young, of Anderson, Vice-President, and Dr. E. A. Hines, Secretary-Treasurer. The luncheon of the Alumni Association of the Medical College of the State of South Carolina was a conspicuous suc-

The scientific program was of high character. Dry clinics were held the afternoon of the 17th by Columbia physicians and a clinical-pathological conference was held on the morning of the 18th by Dr. Robert Wilson and Dr. Kenneth M. Lynch, of this Society, as variations from the customary program. Members of this Society who presented papers were Dr. E. E. Parker, Dr. J. S. Rhame, Dr. John van de Erve, Drs. F. B. Johnson and W. G. Gamble, Dr. L. A. Wilson, and Dr. Kenneth M. Lynch, while Drs. J. H. Cannon, Robert Wilson, J. F. Townsend, J. S. Rhame, R. B. Taft, D. L. Maguire, J. J. Ravenel, F. B. Johnson and Paul Sanders opened discussions.

The members were well entertained and Charleston must look to her laurels in preparation for the next convention.

Delegates: Drs. F. L. Parker, G. McF. Mood, J. S. Rhame, O. B. Chamberlain, and Kenneth M. Lynch, Chairman.

It was moved, seconded and carried that this report be received as information.

The Scientific Session was called at 9:00 P. M.

Dr. R. B. Taft showed a case of malignant ulcer in the roof of the mouth, which he had successfully treated with radium and electric coagulation.

Dr. H. W. de Saussure reported a case of foetus papyratius, and exhibited specimen. Discussed by Dr. Rhame, Dr. de Saussure closing.

Dr. W. A. Smith presented a series of cases of Early Tuberculosis and discussed the diagnosis and treatment. Lantern slides were used in the demonstration.

Dr. Leon Banov exhibited the moving picture entitled "The Doctor Decides."

There being no further business, the Society adjourned.

Secretary.

CHICAGO'S GREATEST RADIOLOGICAL CONVENTION

The Radiological Society of North America will hold its 14th Annual Convention in Chicago, December 3rd to 7th, inclusive, 1928. The Drake Hotel, Lake Shore Drive and North Michigan Avenue has been selected as the headquarters. We are assured of ample accommodation and reasonable rates and of the best and most efficient service.

Make your plans for this year include Chicago's greatest Radiological Convention. Every physician who is interested in this branch of Diagnosis and Therapy is welcome.

There are no Registration fees, no addditional expense. Plans are under way now to secure reduced transportation rates.

The Ladies Local Reception Committee is making plans for the entertainment of all visiting ladies. These plans include theater parties, luncheons, shopping tours and sight-seeing trips, with generous hospitality extended to all visitors.

Much attention is being given to arranging for Scientific and Commercial Exhibits. These exhibits will afford a Post Graduate course of instruction in nearly every branch of Medical Science. Clinics covering Radiological problems as well as other branches of Medicine will be given every day during the session. We are assured by the Program Committee of an instructive and interesting scientific session and a program upon which will appear representative men from all sections of this country and Europe.

Start to make your plans to attend now. This means you. Many papers on General Diagnosis and Therapy will be read and discussed during the Scientific Session.

Bring the wife and family to Chicago, the hub of the United States, with theaters, parks, boulevards and shopping districts second to none.

The location of our headquarters at the Drake Hotel will be found especially convenient. Therefore, make your plans to attend this meeting now. You cannot afford to miss this 14th Annual Session of the Radiological Society at Chicago.

Reservations should be made early. Communicate with Chairman of hotels and lodgings committees, T. J. Ronayne, M. D., West Suburban Hospital, Chicago, Illinois or direct with Drake Hotel, Chicago, Illinois.

Publicity Committee.

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SOCIETY, HELD IN THE DIRECTORS' ROOM OF THE CHAMBER OF COMMERCE, MAY 7, 1928.

The meeting was called to order by the President, Dr. Johnston at 8:20 P. M.

The minutes of the last meeting were not read owing to the absence of the Secretary.

Dr. John M. Fewell was then called upon for

the paper of the evening giving as his subject "Infectious Mononucleosis." The essayist first apologized for not having more than one case to report. The blood picture was as follows: The total leukocytes are not materially increased and are usually within the normal limits. The characteristic picture is the presence of the mononucleated forms in the smear in great numbers usually 75-80% red cells and haemoglobin are not affected. Urinalysis is negative; blood culture and Widal agglutination test are also neg-Temperature runs a rather irregular course, although it is never high enough to give much concern. Sweating is a frequent symp-Aetiology: Vincent's spirillum is found sometimes in cases of Mononucleosis.

Prognosis: Favorable, no deaths have been reported.

Dr. Fewell then reported his case in detail.
Discussed by Drs. Grimball, Murray and
Hearin; closed by Dr. Fewell.

Reports of Clinical Cases

Dr. Grimball reported having had delayed healing of infected mastoid wounds in which Type III and IV pneumococci were the causative organisms. Dr. Mauldin made some interesting remarks about these same cases.

Dr. Tyler reported a case of recurrent ascites in a patient with a three plus Wassermann in which operation was tried with the hope of giving relief; this patient refused specific treatment.

Dr. Hugh Smith reported sequence of a blood stream infection which was reported at a previous meeting. Pain in the perinaem was the most outstanding symptom, following the working up of the case an abscess was found in the posterior urethra.

Dr. Hearin reported a case of ischio-rectal abscess which was very interesting on account of its insidious onset.

Dr. Wilkinson reported two cases—first one of stone in the prostate gland, and second a case of urticaria for four months duration in which there had been no relief from medication. Basal metabolism was 110 above normal. The administration of Lugol's Solution resulted in a clearing up of the urticarial rash in 3 or 4 days.

Reports of Committees. None.

Report of Delegates. Dr. Tyler gave a very interesting report of the proceedings of the recent State Medical Meeting.

Dr. Hugh Smith reported that the Taylor hospital bill had been paid with the funds collected for that purpose.

Dr. Hugh Smith reported that Mr. J. W. Arrington would like for the Society to know that the local Red Cross Chapter would expect assistance in case of disaster from the breaking of the Table Rock Dam.

There being no further business the meeting adjourned.

J. F. Simmons, M. D., Acting Secretary.

WOMAN'S AUXILIARY

South Carolina Medical Association

OFFICERS

Mrs.	W H. Nardin, Anderson, S. C.	President
Mrs.	W. A. Able, Columbia, S. C First Vice	President
Mrs.	D. S. Pope, Columbia, S. C Second Vice	President
Mrs.	I. H. Grimball, Greenville, S. C Recording	Secretary
Mrs.	Frank Wrenn, Anderson, S. C Cor.	Secretary
Mrs.	J. A. Miller, Rock Hill, S. C Publicity (Chairman

COUNCILORS

	m *
Mrs. W. G. Gamble, Jr., Charleston, S. CFirst	District
Mrs. Ben Wyman, Columbia, S. CSecond	District
Third District to be Appointed.	2
Mrs. J. W. Bell, Walhalla, S. C Fourth	District
Mrs. W. J. Dunn, Camden, S. C Fifth	
	District
Mrs. Carl B. Epps, Sumter, S. C Seventh	District
Mrs. L. A. Hartzog, Olar, S. C Eighth	District

The sixth annual convention of the Woman's Auxiliary convened at Trinity parish house in Columbia at ten o'clock Wednesday morning, April 18th, with Mrs. H. M. Stuckey presiding.

Mrs. Garden Stuart, president of Richland County Medical Auxiliary, extended a very cordial welcome which was responded to by Mrs. I. H. Grimball of Greenville. Routine business of the morning, including committee reports, and reports of state officers, councilors, and county auxiliaries, was interspersed with delightful music by the Chicora Glee Club and several solos by Miss Emily Guerry of Columbia.

One feature of the morning session was an address by Dr. John Lovett Morse of Harvard Medical School. Dr. Morse spoke in a very friendly, informal manner, and commended very highly the work of the women in forwarding the movement to erect a memorial to Dr. J. Marion Sims.

Dr. Carter of the United States Bureau of Vital Statistics spoke most instructively on the important subject of South Carolina's position in the ranks of Vital Statistics Area, telling why the state has been dropped from the area of birth registration and asking the cooperation of the women in placing South Carolina back into good standing.

The morning session closed with the president's annual message, which was a gem listened to with rapt attention by the women of the auxiliary who expressed enthusiastic appreciation of Mrs. Stuckey's services and strong assurance that much that has been accomplished in the past years has been due to her untiring efforts.

The afternoon session was featured by an address by Dr. Oren Moore of Charlotte, N. C., who spoke most entertainly and instructively on the subject, "Obstetric Emancipation." He caught the attention of his audience with a whimsical criticism of Judge Ben Lindsey and "companion-

ate marriage," which he characterized in no uncertain terms. In discussing his subeject Dr. Moore, by his earnestness and interest, held the undivided attention of his audience. He stressed the power of the women to spread health propaganda, pausing to pay tribute to the various women's organizations operating in the field of health work.

Dr. Hines, editor of the South Carolina Medical Journal, brought greetings from the Medical Association in session in Columbia at the time.

An interesting attention paid the visiting auxiliary, which served as a social interlude between the morning and evening sessions, was the delightful luncheon served at noon. The tables were lovely with spring flowers and lighted candles. The flowers, deep rose tulips and purple iris, were arranged in green bowls, and lavendar candles burned in single candle sticks. Pine boughs, spirea, and dogwood blossoms were arranged around the room. The visitors were also guests at a reception and dance given for the doctors and their wives at the Jefferson Hotel Wednesday evening.

A drive over the city and a garden party at the home of Mrs. Julius Taylor proved a fitting ending to a very delightful meeting of the Woman's Medical Auxiliary.

(Mrs. J. R.) Mary L. Miller.

CONTRIBUTIONS TO SIMS' MEMORIAL

Previusly published	\$2,974.66
Mrs. James P. Drafts	2.50
John Gabriel Guignard Chapter U. D. C.	
(New Brookland)	2.75
Woman's Book and Flower Club, (New	,
Brookland)	3.25
School Children, (New Brookland)	
Woman's Afternoon Music Club, (Sum-	
ter)	19.50
Anderson Co. Med. Auxiliary	25.00
Spartanburg Co. Med. Auxiliary	40.50
Sumter Art Association	19.50
"Women of York"	50.00
Oconee Co. Med. Auxiliary	8.00

Total contributions May 12, 1928 _____\$3,150.89

Mary K. Boyd,

Treas. Sims' Mem. Fund.

NEWS ITEMS

GRANT DIPLOMAS TO SIXTY-EIGHT

Medical College Winds Up Session—Morse Gives Talk—Remington Joins Faculty—Announcement Made of Honors and Scholarships.

Diplomas were awarded 68 students tonight at the graduating exercises of the Medical College of South Carolina commencement. The commencement address was delivered by Dr. Josiah Morse, professor of psychology and philosophy in the University of South Carolina, who urged upon the graduates that they realize the deep responsibilities which devolve upon them as physicians. The diplomas were awarded by Dr. Robert Wilson, dean, and the annual honors announced.

The Manning Simons scholarships were won by Robert M. Hope of Lockhart, third year student, and Robert Wilson, Jr., of Charleston, second year. The honor students were: Medicine, Gustavus H. Klinck, Jr., Charleston; pharmacy, Robert Cleo Stokes, Bishopville; nursing, Eula Mae Edwards, Wilmington, N. C.

Graduates in medicine are: Philip Edward Assey, Georgetown; Lynwood Kent Bates, Columbia; Allen Craven Bradham, Jr., Manning; George Carroll Brown, Jr., Walterboro; Jeff Watson Chapman, Columbia; Lowell Henry Coleman, Portsmouth, Va.; Joseph Henry Cutchins, Franklin, Va.; Stobo Rosebourgh Gaston, Moore; Hartford Philip Gongaware, Hope Valley, R. I.; William Augustus Hart, Columbia; Elliott Franklin Harrison, Brunson; Webb Haymaker, Philadelphia, Pa.; Edgar Alphonso Hines, Jr., Seneca; Gustavus Herman Klinck, Jr., Charleston; Robert Edward Lee, Scranton; Marvin Heyward Lynch, Lake City; Edward Bryan Michaux, Dillon; Isaac Jenkns Mikell, Columbia; Louis Smith Miles, Charleston; Chapman James Milling, Darlington; James Carlisle Moore, Jr., McColl; Melvin Bond Nickles, Donalds; Lewis Arthur Nimmons, St. Petersburg, Fla.; James O'Hear, Jr., Charleston; Clarendon Etheredge Oxner, New Brookland; Bascom Wilcox Palmer, Timmonsville; Wade Thomas Parker, McColl; Armond Stikes Person, Woodruff; William Joseph Rein, New Orleans, La.; George Sinclair Rhame, Camden; Adolph Ritter, Jr., Ridgeland; Robert Boyd Rodman, Charleston; Paul Earl Sasster, Conway; Arthur McKee Shelamer, Columbia; William Hanley Smith Speissegger, Charleston; Robert Paul Stock, Birmingham, Ala.; John Sughrue, Charleston; Southerne Watson, Bladesboro, N. C.; Joseph Patterson Williamson, Spartanburg; Harry Franklin Wilson, Orangeburg; Isaac Ripon Wilson, Jr., Charleston.

First honor, Gustavus Herman Klinck, Jr., of Charleston, and second honor, Allen Craven Bradham, Jr., of Manning.

Graduates in pharmacy were: Marvin Wightman Davis, 2nd, Marion; Carl William Hertzog, Spartanburg; Paul Jones High, Campobello; Chrysostem Richard Marks, Charleston; Clarence Eugene Mitchell, Westminster; James Lucas Risher, Walterboro; Robert Cleo Stokes, Bishopville.

First honor, Robert Cleo Stokes, Bishopville; second honor, Clarence Eugene Mitchell, Westminster.

Graduates in nursing were: Mattie Lee Benson, Camden; Margaret Meta Brandt, Walhalla; Arletta Manning Bransford, Dillon; Sara Madge Butler, Charleston; Pattie Pearl Byers, Smyrna; Myrtle Beatrice Carson, Moncks Corner; Eula Mae Edwards, Wilmington, N. C.; Mary Ethel Gardner, Norway; Jennie Crosland Gasque, Bennettsville; Amanda Louise Gillespie, Bennettsville; Verna Mae Gray, Lyman; Elizabeth Jenkins Grimball, Yonges Island; Frances Xavier Harvey, Charleston; Thelma Horne, Minturn; Annie Emmalyne Johnson, Greenville; Fredericks Erna Louise Lilienthal, Charleston; Mildred Floride Martin, Ware Shoals; Edith Grace Nesbit, Sumter; Lillian Smoak, Branchville; Edna Gilmore Strobell, Meggett.

First honor, Eula Mae Edwards, Wilmington, N. C.; second honor, Edna Gilmore Strobel, Meggett; honorable mention practical nursing, Thelma Horne, Minturn.

The State, Columbia, S. C., June 8, 1928.

HEADQUARTERS FOR IODINE TESTS TO BE SET UP HERE

Dr. Roe E. Remington Establishes Laboratory at State Medical College

South Carolina's laboratory, in which tests will be made to determine the mineral and medicinal content of vegetables and farm produce grown in the state, will be located in Charleston at the Medical College of South Carolina, it was announced by Dr. Robert Wilson, dean of the medical college and a member of the state food analysis commission.

The selection of a location for the laboratory was left entirely in the hands of Dr. Roe E. Remington, Minneapolis chemist, employed by the commission.

Dr. Remington has been elected a member of the faculty of the medical college with the title of professor of nutrition and director of the food research laboratory.

Practically all equipment has been purchased and is now being installed at the medical college. The actual work of making the tests will be begun within a short time.

The tests were authorized by act of the general assembly creating the food analysis commission, of which Dr. William Weston, of Columbia, is chairman, and appropriating \$15,000 to finance the analysis of South Carolina grown foods and feedstuffs with the idea of determining their content in iodine, calcium and other minerals to the presence of which is attributed the practical absence of goiter in the state.

Dr. Remington is now in Charleston.

WILL SAVE MONEY, DR. WESTON SAYS

South Carolina's iodine test laboratory will be established at the medical college in Charleston, it was announced today by Dr. William Weston, chairman of the state food analysis commission.

Word was received by Dr. Weston today from Dr. Roe E. Remington, the commission's chemist, that he was establishing headquarters in Charleston on account of available facilities at the Medical college. The selection of Charleston, according to Dr. Weston, will save both time and money.

Actual tests of vegetables will be under way within a short time, according to Dr. Weston.

The tests will alternate between products grown in the Piedmont section and those produced in the coastal plain region. Dr. Remington will make thests to determine the content of iodine, calcium and other valuable minerals with medical properties which have served presumably to show a small percentage of goiter in the state.

It was explained by Dr. Weston that no equipment was available at Clemson, no room at the state department of agriculture, and a tremendous outlay would have been necessary to equip the laboratory at the state university in Columbia. Requests are being received daily from all sections of the state for analyses, according to Dr. Weston.

First visible effects of the publicity that has attended authorization of the commission and its work by legislative appropriation of \$15,000 was the sale and shipment of 400 hampers of wax beans to the Atlantic and Pacific Tea company at Montreal, Canada, by Jack Sturgeon, of Lake City, with the cooperation of J. W. McLendon, county agent and custom officials.

The purchasing agent of the chain store company bought the beans on the recommendation of Dr. Weston, and has agreed to buy South Carolina products exclusively in the event the claims of iodine and calcium content are proven by tests to be made by Dr. Remington.

The News and Courier, Charleston, S. C. June 8. 1928,

BOOK REVIEWS

THE NEW YORK ACADEMY OF MEDICINE LECTURES ON MEDICINE AND SURGERY, First Series, 1927, with Thirty-Nine Illustrations, Paul B. Hoeber, Inc., New York, MCMXXVIII. These lectures have been delivered with the general practitiner in mind and are of a very practical trend. They cover a wide range of subjects in which the general man must come in contact with almost necessarily every day. All of them are very creditable and are in advance of the ordinary text-books.

CARDIAC ARRHYTHMIAS, Clinical Features and Mechanism of the Irregular Heart, by Irving R. Roth, M. D., Assistant in Medicine; Chief, Children's Cardiac Clinic, Mt. Sinai Hospital; Instructor in Post Graduate Studies on Diseases of the Circulatory System conducted by Columbia University at Mt. Sinai Hospital, N. Y. Introduction by Emanuel Libman, M. D., Clinical Professor of Medicine, Columbia University. With eighty illustrations and five tables. Price, \$7.50. Paul B. Hoeber, Inc., New York, MCMXXVIII. This book is the outgrowth of a wonderful exhibit in cardiology, at the A. M. A. meeting in 1925. Many hundreds of the physicians of the country enjoyed the instruction at the time by the masters in the profession and will be pleased to find a perpetuation in book form of much that was discussed there.

CLINICAL ASPECTS OF THE ELECTROCAR-DIOGRAM, A Manual for Physicians and Students. By Harold E. B. Pardee, M. D., Assistant Prfessor of Clinical Medicine, Cornell University Medical School, Assistant Attending Physician, New York Hospital; Consulting Cardiologist, Lying in Hospital and Woman's Hospital, New York City. With sixty illustrations, second edition revised. Price, \$5.50. Paul B. Hoeber, Inc., New York, MCMXXVIII. The average practitioner, perhaps, may not be keenly interested yet there are many who desire to know more about the electrocardiograph even from an academic standpoint. The author has given us a splendid treatise on the subject with an extensive bibliography.

LOBAR PNEUMONIA, A Roentgenological Study. A Correlation of Roentgen-Ray Findings with Clinical and Pathological Manifestations. By L. R. Sante, M. D., F. A. C. R., F. A. C. P., Associate Professor of Radiology, St. Louis University Medical School; Radiologist to the University Group of Hospitals (St. Mary's Hospital and Infirmary); Chief City Radiologist to St. Louis City Hospital; Consultant Radiologist Koch Hospital for Tuberculosis, St. Louis Training School, etc. With a Foreword by James T. Case, M. D., F. A. C. S., Battle Creek, Mich. Price, \$3.00. Paul B. Hoeber, Inc., New York, MCMXXVIII. This monograph gives an unsual resume especially from the standpoint of X-Ray studies. The illustrations are very numerous and very good.

THE EXAMINATION OF PATIENTS, (Second Edition). By Nellis B. Foster, M. D., Associate Physician to the New York Hospital; Associate Professor of Medicine at Cornell University College of Medicine. Second Edition, Revised. Octavo of 392 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$4.50 net. Everyone perhaps developes some general plan of examining his patients. All agree that to get the best results a definite system must be followed. The author has outlined such a plan and given many suggestions of practical value.

PRINCIPLES AND PRACTICE OF OBSTE-TRICS, Fifth Edition, Thoroughly Revised. By Joseph B. DeLee, A. M., M. D. Professor of Obstetrics, Northwestern University Medical School. Fifth Edition, Thoroughly Revised. Large octavo of 1140 pages, with 1128 illustrations, 201 in colors. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$12.00 net. Progress continues to be made in obstetrics and probably at the present along conservative lines. The author of this book is a leader recognized as one whose initiative, whose practice and writings give evidence of being alert and open to scientific handling of his specialty. The book is a work of art second to none. The illustrations are superb.

A MANUAL OF THE PRACTICE OF MEDI-CINE (Twelfth Edition). By A. A. Stevens, M. D., Professor of Applied Therapeutics in the University of Pennsylvania. Twelfth edition, revised. 12mo of 657 pages, illustrated. W. B. Saunders Company, Philadelphia and London: 1928. Cloth, \$3.50 net. These small manuals probably continue to be popular with medical students but they also have much available as a ready reference for the general practitioner.

A TEXT-BOOK OF GENERAL BACTERI-OLOGY (Ninth Edition—Thoroughly Revised). By Edwin O. Jordan, Ph.D., Professor of Bacteriology in the University of Chicago and in Rush Medical College. Ninth Edition, thoroughly revised. Octavo of 778 pages with 191 illustrations. Philadelphia and London: W. B. Saunders Company, 1928, Cloth, \$6.00 net. Bacteriology is always an interesting department of science. Devoted investigators continue to bring forth out of their laboratories vital contributions to medicine and surgery. This book has gone through nine editions which is evidence of its continued worth.

GONOCOCCAL URETHRITIS IN THE MALE, For Practitioners. By P. S. Pelouze, M. D., Associate in Urology and Assistant Genito-Urinary Surgeon at the University of Pennsylvania. Octavo volume of 357 pages, illustrated. Cloth, \$5.00. Philadelphia & London: W. B. Saunders Company, 1928. The hazy understanding and treatment of Gonorrhea and its complications has been a blot on medicine throughout the ages. Slowly but surely earnest and patient students have been busy with instruments of precision clearing up the confusion and are succeeding admirably at the present time. This author deserves great credit for his efforts in this direction.

THE SURGICAL CLINICS OF NORTH AMERICA (New York Number), (Issued serially, one number every other month). Volume 8, number 2. (New York Number—April, 1928). 256 pages with 90 illustrations. Per Clinic year (February, 1928 to December, 1928). Paper, \$12.00; Cloth, \$16.00. Philadelphia and London.

SITUATIONS WANTED

WANTED: Salaried Appointments for Class A Physician in all branches of the Medical Profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoc's National Physicians' Exchange, 30 North Michigan. Chicago. Established 1896. Member The Chicago Association of Commerce.

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MINUTES

MINUTES HOUSE OF DELEGATES

President's Address Before House of Delegates, April 17, 1928, Columbia, S. C.

By D. Lesesne Smith, M. D., Spartanburg, S. C.

I wish to express my appreciation of the honor which you conferred upon me in electing me President, and whilst the position has not been an easy one to fill I have derived untold pleasure out of the service. I have not been able to do all that I wish to have done and have left undone many things that should have been done. I wish to express my sincere thanks and appreciation for the hearty cooperation of the various members of our Association who have assisted me in the many undertakings. I would like to suggest that we follow the example of many of our sister States and elect a President Elect so that he may have a longer time to pursue his policies and carry them to a successful fruition. I cannot refrain from repeating the former President's appreciation of our Secretary. He certainly gives his whole heart, soul, and body to the work and is never tired of promoting the best interest of our Society. We could say lots more about him but I am sure you all appreciate his efforts as much as I do.

It has not been customary for the President to delve in the innermost workings of the various organizations that are responsible to this House of Delegates. I would like to recommend that in the future our Presidents should investigate thoroughly the workings of the Board of Health, the State Board of Medical Examiners, and other

organizations of this type.

Desirous of doing the thing in which I could aid our State best this year, I decided that the Periodic Health Examination which our Secretary had been trying to put over would be a good thing to concentrate on. With this end in view, we had a meeting of a number of the leading doctors of the State at Columbia, so as to get their views on the subject and ask for their cooperation. We spent four hours in very helpful discussion of the subject. It was decided at this meeting to cover every civic club in the State. This has been done and lately we undertook to have speakers appear before college students. In my correspondence with the college presidents, I find that several colleges have already made a wonderful start along this line. Clemson College, which I visited, has a physician, Dr. Lee W. Milford, who has caught the vision and is doing a thorough piece of work, each boy being given a physical examination at the be-ginning of each year. This is done by a group of physicians who seem to have done their job thoroughly. They employ various specialists to assist him. At the University of South Carolina, they began this work but found it cost them \$3,000 a year which they had to discontinue because of lack of appropriation. It is too bad for so small a sum, such a piece of constructive work has to be discontinued. At Clemson College I visited their hospital. It is the same building that was built thirty years ago. It is a frame structure and is really a fire trap and unsafe for

the youths of our State. I would sincerely recommend that the House of Delegates go on record as recommending a fire-proof building for this college hospital

college hospital.

The Medical College of the State of South Carolina, through the South Carolina Medical Association, began to put on a post-graduate course of two weeks last fall. This course was well attended and was much appreciated by men who took advantage of it. It is to be repeated this year.

The Board of Trustees passed a resolution last year offering the services of any of the members of the faculty to visit any of the Counties which requested their services. They have been freely given to any of the Societies that have asked for them. The Medical College belongs to us and they stand ready to cooperate with us in any way that they can be of service to our State.

I noticed in the paper at the fall meeting of the Board of Medical Examiners that twentythree out of eighty nurses applying for registration had failed. I requested our Committee on Hospital Standardization to investigate this matter. They have a report of their investiga-tion to submit at this meeting. I find upon per-sonal investigation that Virginia, North Carolina, Georgia, and Florida have a separate Board for nurses. Complaints which has frequently come to me is that the Board charges \$10.00 for certifying to a man's certificate when he is applying to other states for a license by reciprocity. This is done by other states but it seems to me that it is a rather excessive fee for the work that is entailed and I would recommend that our House of Delegates take this matter up and discuss it pro and con. The Nurses have been for a number of years asking for a separate Board. They seem to think that their conditions would be much improved if they could have this privilege. I asked the Hospital Association, the Nurses Association, and the South Carolina Medical Association to appoint a committee from each body and have a joint meeting and discuss this matter. It seems to me that there is some common ground for us to meet on. Certainly I believe that we can improve conditions by making some change somewhere, for I understand the nurses in our State, who hold a certificate of registration from our Board is unable to get reciprocity as is commonly done by other States. I am reliably informed that our State has the lowest ranking than any state in the union in regard to this matter.

The executive committee of the State Board of Health seems to be working with the best of motives. They have a large field of endeavor and undertaking of so many various and varied matters that it is hard for one to over the field of their activities. I have heard many criticisms of their work and have investigated as best I could and find that these criticisms were in the main unfounded, unjust, and that they were not worthy of being mentioned in this report, except, that of the County Health Unit. The State Board of Health has only a supervisory and no direct control over most of these units. They are consulted as to who shall be put in charge of

them but in the majority of instances they have no power to dismiss these physicians, nor have the right to direct their actions. The State Board of Health is not responsible for their various activities. It is true that the State Board of Health cooperates by sending out special representatives to assist these various health units in their work, such as sanitary engineers and other experts; so it is very easy for us to connect the State Board of Health with these activities.

Many of us are opposed to the Tonsil Clinics which are being conducted in our various counties. The State Board of Health does not sanction these, nor sponsor them, yet they are blamed for these because the individual county unit at times conducts these or sponsors the Clinic.

It it with a great deal of interest that I wish to commend Dr. William Weston for his efforts in regard to the study of food in our State and it is with much satisfaction that I note that the legislature has appropriated \$15,000 for this work. I feel that much good will come from this and our State will owe an everlasting debt to him for his efforts.

REPORT OF THE SECRETARY

Dr. Edgar A. Hines, Seneca, S. C.

The membership of the South Carolina Medical Association stands now at 817 as reported from 42 constituent County Societies. This is an increase of 43 members over the report a year ago. There are 1309 physicians in South Carolina, a decrease of 124 in 13 years with an estimated increase of population of two hundred thousand people. The proportion of members of the Association to non-members is more satisfactory. The Association shows now its greatest growth. For the first time in the 80 years of its history every County has or has had some form of organization. Berkley County has within the year been brought for the first time into the Association. It is an interesting coincidence that Dr. D. L. Smith, President of the South Carolina Medical Association was born in Berkeley County and that during his administration the lost link in the chain of organized medicine should have been forged. It is requested that this House of Delegates approve the Charter and commend the physicians located in Berkeley County for their diligence in perfecting the organization.

While our numerical strength continues to increase, yet there is grave danger of losing at any time one of our delegates to the American Medical Association, owing to the rapid growth of that body unless we maintain a maximum mem-The trienniel apportionment will be bership. made again in June, 1928. Your Secretary responded to many calls for addresses during the year, perhaps the most prominent being the address on Periodic Health Examinations before The Medical Association of Georgia at Athens, May, 1927. Your Secretary made every effort to carry out the wishes of the Association in promoting the Post Graduate Courses at the Medical College of the State of South Carolina. He attended these courses himself and was honored with the Presidency of this first historic class.

Your Secretary has served for the third year on the State Committee of the American Chemical Society to award prizes for the best essays in the high schools on certain chemical problems. This year one of the subjects was "The Contributions of Chemistry to Medicine." Dr. R. N. Brockett, Chief of the Chemistry Division of Clemson College is the Chairman of this Committee.

Your Secretary attended the Conference of State Secretaries and Editors of State Medical Journals at the A. M. A. headquarters in Chicago,

November, 1927.

These Conferences are not only informing, but stimulate ideas and growth of organized medicine. Next to the House of Delegates of the American Medical Association, this Conference constitutes one of the most potentially dynamic medical bodies in the world.

To conclude with a summary of the impressions of the year in the Secretary's office:

1. Organized medicine in both the Southeastern and Southwestern sections of the State has made decided progress.

2. There has been a marked interest throughout the State in better Scientific programs and in publishing them in the Lungal

in publishing them in the Journal.

3. Some of the Scientific programs, that of the Marlboro Society for instance have attracted a large attendance even from surrounding states.

4. The Societies allied to the State Association either organized by the Secretary or encouraged by his office are now in a highly flourishing condition, to wit:

1. The Womans Auxiliary.

The South Carolina Pediatric Society.
 The South Carolina Urological Society.

4. The South Carolina Eye, Ear, Nose and Throat Society.

5. The South Carolina Public Health Association.

6. The South Carolina Hospital Association.7. And meeting with us for the first time

this year, The South Carolina Mental Hygiene Society.

All of these organizations function with admirable smoothness and supplement the great work of the South Carolina Medical Association itself.

5. The Columbia meeting will demonstrate the further encouragement of the Secretary's office in the matter of Scientific, Public Health and Commercial Exhibits.

On this point our Association has not measured up to its opportunities in the past as compared

with some other states.

In conclusion, the Secretary is grateful for mand evidences of loyal support on the part of the officers and members, and feels that we are now really in sight of the goal of years:

A membership of 1,000.

Seneca, S. C., Feb. 4, 1928.

Dr. E. A. Hines, Secretary, South Carolina Medical Association,

Seneca, S. C. Dear Sir:—

At your request I have audited the books of the South Carolina Medical Association and the Journal of the South Carolina Medical Association, and hand you herewith my reports on same.

The excellent condition of the Association and the Journal is reflected on the books by the increased membership and increased advertising receipts. I find that accurate records have been kept of all receipts and disbursements.

Yours truly, (Signed) Frances R. Richardson, Auditor.

(Copy)

The Seneca Bank,	Statement of Assets	
Seneca, S. C., Feb. 6, 1928. Dr. E. A. Hines, Secretary-Treasurer,	Cash in Seneca Bank Time Certificate Deposit	\$1,360.78 1,000.00
South Carolina Medical Association,		
Seneca, S. C. Dear Sir:—	No. Liabilities.	\$2,360.78
This is to certify that at the close of business	TVO. ZIMOITUICS.	
on December 31, 1927, there was on deposit in The Seneca Bank to your credit as Treasurer of The South Carolina Medical Association \$433.20, as Editor of Journal South Carolina Medical As-	STATEMENT OF SIMS MEMORI. SOUTH CAROLINA MEDIO ASSOCIATION—1927	AL FUND, CAL
sociation \$1,360.78. You also hold our Certificate of Deposit No. 3695 dated May 15, 1927, and	Receipts	
due one year after date for \$1,000.00.	Balance in Bank, Jan. 1, 1927	\$ 95.70
Yours very truly, THE SENECA BANK,	Columbia Medical Society	306.88
(Signed) By H. H. Macaulay.	Marlboro Medical Society Oconee Medical Society	$\begin{array}{ccc} & 35.00 \\ & 5.00 \end{array}$
(Copy)	Dr. J. S. Norsley, Richmond, Va	10.00
REPORT OF SOUTH CAROLINA MEDICAL		\$452.58
ASSOCIATION—1927	7.1	
	Disbursements	
Receipts	Mrs. Wm. A. Boyd, Treas. Women's A iliary, S. C. Medical Association	.ux- \$ 452.58
Balance in Seneca Bank, Jan. 1, 1927\$ 486.30 Membership Dues 2,211.00	•,	
	NUMBER OF MEMBERS BY COUN	TIES_1927
\$2,697.30		
Disbursements Printing\$1,560.35	Allendale	6
Expenses two delegates to American	Aiken	14
Medical Association 200.00 Traveling Expenses, Secretary 173.80	Anderson Abbeville	$\begin{array}{ccc} 44 & 3 \\ 9 & 2 \end{array}$
Expenses, Official Stenographer of Con-	Bamberg	9
vention 153.95	Parnwell	. 10
Stamps 106.00	ColletonChesterfield	. 10
Annual Audit 50.00 Sundries 20.00	Clarendon	. 10 . 6
Balance in Bank, Dec. 31, 1927 433.20	Columbia	. 80 12
	Chester	. 12 2
\$2,697.30 Statement of Assets	Charleston Cherokee	. 81 6 . 9
Cash in Bank\$ 433.20	Dorchester	6
Office Furniture and Fixtures 516.64	Darlington	
\$ 949.84	FdgefieldFlorence	. 1 . 19 1
No Liabilities.	Fairfield	. 4
Total Assets of S. C. Medical Association and	Greenwood	. 18
Journal	Georgetown Creenville	. 6 . 80 5
Medical Association \$949.84 Journal 2,360.78	Horry	5
2,000.18	Hampton	
\$3,310.62	KershawLaurens	$\begin{array}{ccc} 12 & \\ 18 & 4 \end{array}$
	Lee	7
STATEMENT OF JOURNAL SOUTH CARO-	Lancaster	
LINA MEDICAL ASSOCIATION—1927	Lexington Marlboro	
Recipts	Marion	9
Balance in Bank, Jan. 1, 1927\$ 974.71	Newberry	24 2
Subscriptions 1,477.00 Advertising 2,491.60	OrangeburgOconee	$\begin{array}{ccc} 18 & 1 \\ 13 & 2 \end{array}$
Interest on time deposit 50.00	Pickens	15 2
24.000.01	Spartanburg	
\$4,993.31 Disbursements	Sumter Saluda Saluda	
Salaries\$2,735.20	Union	
Printing 477.35	Williamsburg	10
Office Expense 146.25	York	
Traveling Expenses 128.58 Office Equipment 92.15	Beaufort and Jasper	
Sundries 53.00		748
Balance in Bank, Dec. 31, 1927 1,360.78	Honorary Fellows	56
\$4,993.31	Total Membership	804
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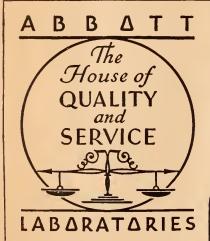
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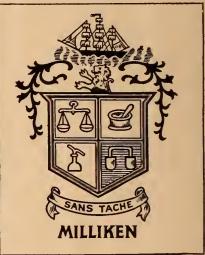
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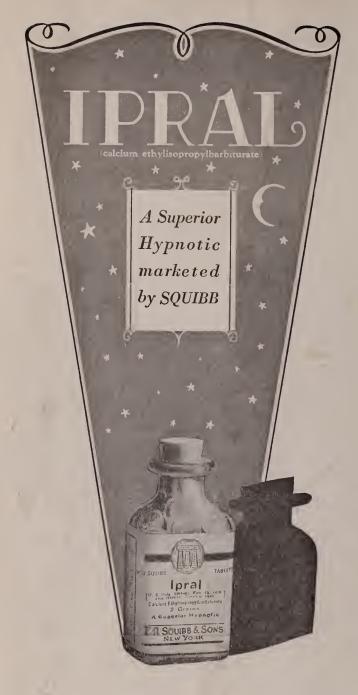
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The Journal

South Carolina Medical Association

VOL. XXIV.

GREENVILLE. S. C., JULY, 1928

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The Iournal

OF THE

South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

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EDITORIAL

HIGH SPOTS OF THE A. M. A. MEETING AT MINNEAPOLIS—SOUTH CARO-LINA DOCTORS TAKE PROM-INENT PART

The meeting of the American Medical Association at Minneapolis in some respects surpassed all others. The new Auditorium, the second largest in America, had extraordinary facilities for taking care of the convention practically all in one place. The attendance was around five thousand. The following South Carolina doctors were registered: Drs. James R. Allison, Columbia; T. G. Brockman, Greer; J. H. Cannon, Charleston; W. G. Gamble, Jr., Charleston; James A. Hayne, Columbia; E. A. Hines, Seneca; J. W. Jervey, Greenville; C. J. Scurry, Greenwood; William Weston, Columbia. The two delegates from the State Medical Association, Drs. Cannon and Hines attended every meeting of the House of Delegates. Dr. Hines was appointed on the Reference Committee of the House on Rules and Order of Business. Dr. Cannon took part in the discussion of one of the very important papers in the Section on the Practice of Medicine. Dr. J. W. Jervey opened the discussion on an interesting contribution in the Section on Ophthalmology. Dr. William Weston of Columbia had an admirable exhibit on vitamins in the Section on Diseases of Children's exhibit. This leads us to the observation that never before perhaps in any country has a scientific exhibit been so extensive and so practical in the application of the principles of medicine and surgery.

A new feature was introduced this year of having two days of clinics and lectures by men of great eminence instead of moving picture demonstrations.

The House of Delegates enacted legislation of far reaching importance. It is significant that provision was made for the expulsion of members upon sufficient charges and due consideration on the part of the Judicial Council.

Secretary West in his report called attention

to the menace of the multiplicity of medical organizations in America from the standpoint of divided loyalty to the County, State and A. M. A. Associations. It must be conceded that when the County Medical Society loses its leadership the superstructure of American Medicine will suffer accordingly. The House of Delegates appeared to be unanimous in going on record to sustain in every way possible the interest and integrity of the County Medical Society.

In the domain of medical economics President Jabez N. Jackson emphasized that it is time for the American profession to give close attention to the problem of overcoming the abuse of charity clinics in which in many instances the profession is continually called upon to give more than their share of time and service to this cause.

In the matter of further standardization and classification of hospitals of America the House of Delegates approved of the plans of the Council on Medical Education and Hospitals to enlarge the scope of its activities.

In the field of medical education and the supply of physicians to rural communities the House of Delegates was not unmindful of the difficulties of the proper distribution of medical men and will continue to study the problem with a view toward a satisfactory adjustment, yet there is no probability that it will come through the lowering of standards of medical education.

There is one new Council, established a year or so ago, now getting into full swing, the Council on Physio-therapy, with tremendous possibilities. There is no doubt that medical men in many localities need expert guidance in the purchase and the use of these physical agents in the diagnosis and treatment of disease. Large sums of money have been invested by individual physicians and hospitals along this line not always with the best returns for the outlay. The new Council will be a clearing house for scientific information and without cost to the members of the American Medical Association. The Council is now engaged in more or less extensive research, has already published some valuable papers, and shortly will bring out a book embodying the work of the Council and the result of its investigation. We urge our members who contemplate expenditures for apparatus along physiotherapy lines to keep in touch with the Council, especially requesting their reprints as the articles come out in the Journals.

The House of Delegates expressed great interest in the progress of the Woman's Auxiliaries throughout the United States. Elsewhere in this issue of the Journal will be found an interesting report of the Woman's Auxiliary at Minneapolis and the prominence accorded South Carolina.

Owing to the rapid growth in recent years of the South Carolina Medical Association our State was enabled to retain its two delegates for the next three years. Seven hundred and seventy-five was the figure on which the representation was determined. South Carolina was fortunate in being credited with eight hundred and thirty-five members.

At the Minneapolis session Dr. W. S. Thayer of Baltimore, so well known and honored by the profession of South Carolina as elsewhere, assumed the office of President. Dr. M. L. Harris of Chicago, Chairman of the Judicial Council was the President Elect and Portland Oregon selected as the next place of meeting.

A number of the South Carolina representatives including the two delegates, Drs. Cannon and Hines, Dr. W. G. Gamble, Jr. and Mrs. W. G. Gamble, Jr., Delegate to the National Woman's Auxiliary, stopped over for some days on their return at the Mayo Clinic. To one who has been visiting this famous "mecca" at regular intervals for the past twenty years the evidences of growth and extraordinary activity are manifest. When it is considered that more than sixty thousand patients are admitted annually and that the week of our visit about twelve hundred new patients were received this marvelous growth is not so surprising. One notices with pride the new office building now nearing completion at a cost of about two and a half million dollars. To one riding over the beautiful rolling country about this magic city of Rochester and viewing this sky scraper doctor's office building with the chimes in its tower from England he entertains an inspiring reminiscence in comparison with the village doctor's office in the early days of

American medicine. Both Drs. W. J. and Charles Mayo and the other one hundred and fifty members of their official staff were gracious in the extreme to the hundreds of visiting physicians taking advantage of the A. M. A. meeting to stop over at Rochester.

The physicians from South Carolina on the staff, to the number of about half a dozen representing our splendid school at Charleston are all making good and thus keeping the name of our medical school well to the forefront with other class A schools of the country. Drs. H. P. Wagener and W. L. A. Wellbrock, the former Associate in Opthalmology and the latter Assistant in the Department of Pathology were especially kind to the delegates from South Carolina. Dr. Wagener has just returned from an extensive tour of Europe and has many interesting observations to relate about the clinics over there. Dr. Wellbrock, it will be remembered, read an admirable paper before our Association at Columbia. These two gentlemen often visit Charleston and their native state and will probably attend the meeting of the State Medical Association in 1929.

KEEP THE OFFICIAL FAMILY BUSY— SUGGESTIONS FOR GOOD PROGRAMS

In many states it is the custom for county and district Medical Societies to extend invitations to the various officers of the State Medical Association to visit their societies during the incumbency of their respective offices. To some extent this plan has been followed in our state but it should be very much enlarged upon. The President and the Secretary have both throughout the history of the State Medical Association responded to these calls with unselfish devotion and so have some of the other officers but the membership will be very much edified if the energy and abilities of the entire official family be called into play. The Chairman of the Council, Dr. S. E. Harmon of Columbia we are sure will respond in the future as he has in the past to these calls. The other seven members of the Council, all of whom are worthy of the high honor conferred upon them will do likewise. The Council is really the governing

body of the State Medical Association, supervising its Journal and finances, keeps in touch with all legal and ethical questions and is in possession of a vast amount of information about organized medicine. Most of them have been in office a long time and have acquired familiarity with the details such as is not in the possession of anyone else. Our distinguished President, Dr. R. E. Hughes, of Laurens, we are informed is improving in health and will of course, when he is able to do so, visit and confer with the profession throughout the state. The vice-presidents are all active men and we are confident anxious to serve in any way possible to promote the interest of organized medicine. Members of the Executive Committee of the State Board of Health have always been enthusiastic visitors and supporters of the health policies of the Association. The State Board of Medical Examiners by virtue of their high position and leadership in medical education should be invited to take part in discussions along their particular lines of endeavor.

The faculty of the Medical College of the State of South Carolina stands ready to respond to calls in the future as they have in the past in connection with the very successful post graduate courses at the Medical College.

The machinery for coordinated effort in every phase of medicine in South Carolina is not surpassed any where in the world. We have had in the past year or so an unusual number of distinguished medical men from outside of the State appear on the programs of county and district Societies and this is often desirable and stimulating. On the other hand we urge our members to continue to devise ways and means of promoting the interest of the various societies by a larger use of the above suggestions. We are heartily in accord with the opinion of the officials of the American Medical Association that we should leave no stone unturned to further the original idea in organizing a County Medical Society. It certainly will lead to scientific atrophy if the individual members, especially in our smaller societies fall short in their attendance and contributions to the scientific programs.

There is another body of men in our State

in this connection we wish to continue to honor and to profit by their wisdom and scientific attainments; namely, the past Presidents of the State Medical Society. There are about twenty of them living and active. They stand ready to respond to calls to visit county societies in many instances.

Again at the Minneapolis session of the A. M. A. a new interpretation was placed upon the scope of the duties of delegates elected by State Associations to the House of Delegates of the A. M. A. It was emphasized that the delegates fresh from contact with the greatest medical minds of America were peculiarly well attuned to the latest developments in scientific and economic medicine and that by going out into their respective states before constituent societies they could impart not only this knowledge but awaken enthusiasm for the higher ideals of the leaders in our great profession. While these lines are being penned the usual summer lethargy is evident but our societies have never given up fully to summer vacations and the suggestions may be worthwhile before the summer is over but we had in mind the large number of splendid Presidents and Secretaries who are now planning as they should do their fall and winter programs. We wish to urge that the above information and comments be favorably considered for the general

good of the entire Association. We have not as yet said anything about the fortunate selection of Charleston for the meeting of the State Medical Association in 1929. The fact, however, that we meet there leaves no question in our minds about the success of the convention. There never has been a failure in our eighty years on this score. Every meeting there gets bigger and better. We do wish, however, to stress a phase of modern society programs growing in State and National importance and which the place of meeting next year will fit into in such a splendid way, that is the large place that is now being given almost everywhere to the clinic. We would like to see a concerted effort to concentrate on clinic programs from the mountains to the sea the coming year and as a culmination and grand climax enjoy at Charleston the most wonderful clinical program ever put on by the Charleston Society and the Medical College. The facilities there need no apology. An institution with more than one hundred years of successful teaching behind it has long since worked out the problem of the best way to present clinical programs, but coupled with a concentrated effort in all the constituent societies throughout the State we believe a clinical atmosphere will be created of compelling interest.

COURSE IN THE PROBLEMS OF OLD AGE

The Medical Problems of old age will be considered in a Graduate Fortnight Week of the New York Academy of Medicine next fall during the two weeks beginning, October first. The course has been arranged to suit the convenience of physicians generally. Clinics will be given in hospitals in three sections of New York simultaneously,—uptown, middle New York, and downtown,—while lectures will be given in the Academy of Medicine, 2 East 103rd Street, in the late afternoon and early evening, with provision for supper to those who wish to stay at the Academy. Physicians

from out-of-town will be welcome at the clinics and lectures and no fee will be charged.

The treatment of diseases of old age has never become a popular specialty, although physicians formerly used the term geriatrics to denote that specialty. The word comes from the Greek geron, an old man, and is homologous to the Greek root, paid, a child, in the word pediatrics. The exact title of the course is "The Problem of Aging and Old Age." There seems to be come controversy regarding how to spell the word aging. Orthographists who conform to the letter of the rules of spelling insist on dropping the final e before the ending. Which do you prefer, aging or ageing?

ORIGINAL ARTICLES

.....

PERIODIC HEALTH EXAMINATIONS*

By J. Heyward Gibbes, M. D., Columbia, S. C.

Such an homely expression as an ounce of prevention is worth a pound of cure puts a fairly just estimate on the comparative effectiveness of medical science and art in keeping people well on the one hand and in getting them well, once they are sick, on the other. Preventive medicine has gloriously attained to the position of an exact science, causes and effects have been conclusively demonstrated, and practical results have shown the soundness of theories. It has a consistency of accomplishment that justifies pride and commands admiration and confidence. The benefits that have been conferred upon civilization by preventive medicine are immeasurable. The control and, in some instances, the all but complete eradication of many diseases of bacterial origin, some of which formerly swept nations in plague-like proportions, the protection of individuals against such diseases by artificially induced immunity reactions, the recognition of the insect carriers of such diseases as malaria and yellow fever and the successful war against these insects, the understanding of the manner in which the metazoan parasites, especially the tape worms, round worms and hook worms, find their way into the human body and the devising of measures for the prevention and correction of these conditions are among the more tangible and easily appreciated activities of preventive medicine. The success which has attended these efforts has been in no small part due to an effective educational campaign which has been wisely conducted in connection with them and by which the interest and cooperation of the public has been obtained.

Curative medicine, likewise, has much of which to be proud. Its effectiveness has been immensely increased by the same physical and biological researches that have elevated preventive medicine to its present high position,

and refinements of investigative and therapeutic technic, including surgical procedures, have added greatly to the chances of an individual's recovery from illness. But its efforts are hedged about with inherent difficulties that are obvious to the clear-thinking and conscientious physician and to the well-informed layman as well. It is from a realization of the relative ineffectiveness of curative efforts that the idea of extending the field of preventive medicine to the guiding of the individual away from mental and physical pitfalls that lie before him originated. This idea has culminated in the movement for periodic health examinations, inaugurated by the organized medical profession of this country in 1922. The intentions back of the movement are of the best, the general conception of it is sound, and it only remains to be seen if its workings are practicable. Can clinical medicine, even as the result of a conscious effort, produce sufficiently exact results to entitle it to a place in the field of preventive medicine?

My purpose is to present to you the programme of periodic health examinations as I understand it, and to consider some of the problems that are carried with it.

By periodic health examinations is meant the plan by which presumably healthy individuals are to seek at stated intervals a sort of stock taking as regards their health. They are to submit themselves to an expert in such matters for a survey of all of the factors in life that might have a bearing on the continued soundness of mind and body. The first authentic advocacy of such an idea seems to have been made by Dr. Horace Dobell, a London physician, in 1861. But his efforts failed of fruition. In 1900 Dr. George Gould renewed the notion, but, again, no organized effort was made to put the plan into effect. In 1909 the Providence Life Insurance Company undertook the periodic examination of its policy holders and was convinced of a satisfactory return for the effort. Under the leadership and patronage of some of the foremost men in public life in America the Life Extension Institute of New

^{*}Read by invitation before the meeting of the South Carolina Public Health Association at Columbia, S. C., April 17, 1928.

York was established in 1914. This organization proceeded upon the plan of examining presumably healthy people and of pointing out to them means whereby they were to remain healthy. It is probable that the activities of this organization played no small part in stimulating the House of Delegates of the American Medical Association to officially launch the plan for making periodic health examinations a national custom.

The Council on Health and Public Instruction of the American Medical Association has recognized the responsibility that they have assumed in sponsoring this movement. It is their belief that the family physicians, or general practitioners, if you please, are capable, or can be made so, of making these examinations, and it is their policy to encourage them to equip themselves for the undertaking of such service. They have published a manual to serve as a means of instructing the rank and file of the profession in the making of these examinations, they have prepared history blanks and forms for the recording of the results obtained, and they have entered upon a publicity campaign looking to the encouragement of the people to have such examinations made.

The sponsors of this movement have gone thoroughly into the subject. They recognize that an effective health survey of the individual must take into consideration his hereditary predisposition to certain diseases, that his environment must be investigated, his habits delved into, his previous illnesses detailed, his mental tendencies outlined, and the present status of his organic structure and function carefully estimated. They have prepared instructions for such an investigation and have offered suggestions as to the advice that should be given for the correction of such defects as may be encountered.

With such a comprehensive programme before us, it behooves us to stop for a moment and consider whether there be a genuine necessity for it. We are all familiar with the fact that the control of infectious diseases and the institution of general hygienic measures, including the all-important improvements in the feeding of infants and children, have resulted in the past two decades in extending the expectancy of life from forty years to fifty-five years. But, at the same time, no material advance has been made in extending the total span of human life. In other words, when we reach fifty-five years of age today our position is no more secure than was that of our grandfathers at a similar age. The so-called degenerative changes, arteriosclerosis, high blood pressure, nephritis, diabetes and cancer continue to levy their toll. The fact is that more people are dying of such troubles now than ever before, for the simple reason that more of them are reaching the age at which such diseases are common. We have good grounds for belief that these diseases can be delayed in their appearance, and in many instances entirely avoided, if habits of living be properly directed and remediable physical defects corrected. The onset of these changes is often insidious, frequently unaccompanied by symptoms that might serve as a warning to the victim, when the only means of detecting them lies in a properly conducted medical investigation. In earlier years of life diseases of the heart may be detected objectively when the patient is in no sense aware of a disturbance in the organ. Proper guidance under such circumstances may serve to extend the usefulness of the organ through a normal expectancy of life, whereas a failure to be informed may lead to physical indiscretions that will result in relatively early death. Tuberculosis is another disease which taken in time might lead to a happy issue, while, if this opportunity be omitted "all the voyage of their life is bound in shallows and in miseries." Thus, it would seem that there is ample justification for the belief that properly conducted periodic health examinations might result in the prolongation of the period of good health and the actual lengthening of life.

It would seem that we might have sufficient statistical material from the records of the Life Extension Institute and certain of the life insurance companies that have been periodically examining some of their policy holders over a period of fourteen years or more to say conclusively that such examinations have resulted in better health and longer life. The fact is that the available statistics do indicate that such is the case. For example, the Metropolitan Life Insurance Company reports a reduction of mortality of eighteen per cent among their policy holders who submitted to periodic

examination, while in the elderly group there was a reduction of more than fifty per cent. Similar figures are presented by the Guardian Life Insurance Company. It seems to me, however, that these statistics can not be accepted as conclusive, for the movement is not vet sufficiently general to render it at all likely that the companies have obtained anything like an average of the risks among their policy holders. It is much more likely that the careful men and women, those already inclined to be more than commonly watchful of their health, and consequently already having a better expectancy, are the ones that have submitted themselves for the examinations, and on whom the statistics are based. But it does show, nevertheless, that care in such matters will lead to ample reward.

The following table from the Manual of the Life Extension Institute will serve to show in a practical way the need for such examinations. The table is derived from the examinations of 300 New York Business Men:

Class Per cent 1. No physical defects or errors in hygiene _____ o 2. Very minor defects requiring attention or observation _____ Minor defects requiring hygienic correction or minor medical, surgical, or dental attention _____ 21 Moderate defects requiring medical supervision as well as hygienic cor-Impairment influencing rection. longevity ______61 5. Advanced physical impairments requiring systematic medical or surgical attention _____ 6. Serious physical condition requiring immediate medical or surgical attention _____ At the Cornell University Health Clinic, the

nature of the clientele not being specified, it was found that forty-four per cent of the applicants needed nothing more than hygienic advice. But even advice of this kind may be of the greatest importance as regards health and longevity.

A matter of the greatest importance is to determine whether the public really wants the service which the American Medical Association is now undertaking to offer it. It is prob-

able that the public does not know whether it wants it or not. The average man is peculiarly indifferent about his health and medical matters in general until the need for such interest is forced upon him by disease. And even then a goodly number of our citizens give a woeful exhibition of ignorance and faulty judgment: witness, the success of quacks and patent medicines. When the Metropolitan Life Insurance Company offered to examine their policy holders only 2 to 2.5 per cent of them took advantage of the opportunity. But it is highly probable that as time goes on the interest of the public will be aroused. If the plan has merit in it, it is certain of success, but we are going to win the public interest and approval by deeds rather than by words.

That there are dangers in the movement is not to be overlooked. If the examinations are not to be done thoroughly, they had better not be done at all. And we must not lose sight of the fact that we are dealing with suggestible minds as well as physical bodies, that approximately thirty per cent of our patients today fall into the class of neurotics, and that indiscreet remarks and misinterpretation of findings might easily add many of our so-called health clients to this group. The analogy between the human body and a piece of machinery, especially the automobile, is frequently drawn, and we are urged to send out machines to the shop for periodic overhauling and repair. But many automobile owners have found that their cars come out of the shop in worse condition than they entered. We must not permit of the same criticism being directed at the health shop. I am inclined to the view that it is unwise to urge that every one be examined at an arbitrary period, for example, each year. There are some individuals who need contact with physicians more frequently than this; there are others who are better off for giving the doctors a wide berth. It is necessary that these things be kept in mind as the programme is unfolded.

This campaign on the part of the organized medical profession represents to some extent a radical departure from the attitude toward prospective clients that they have maintained in the past. We have properly held ourselves aloof from the seeking of business, we have sought to avoid even the appearance of encouraging people to see us, and we have scorned

anything that smacked of advertising. As our programme for periodic health examinations advances, much of this must be changed. This may be for the better. But we must keep before us that it is the medical profession that is taking the initiative. The American Medical Association and its subsidiary bodies are conducting a propaganda to have the public subscribe to the movement. They have recognized the responsibility which they are assuming by at the same time urging the rank and file of the medical profession to equip itself for making the examinations and have tried to devise ways and means for its instruction. 1 am not at all sure but that the latter process should have preceded the former, and I am inclined to think that some means should be devised by which the activities of the individual physician in such matters can be supervised and checked.

As mentioned above, the American Medical Association has officially adopted the idea that the family physicians are to be encouraged to make these examinations. And there are strong considerations in support of the position that they have taken. The merit of the general practitioner continues to be the solid rock on which respect for the medical profession is founded. It is his unselfish and intelligent service, his ready response in the time of need, and his diversity of accomplishment in all lines of medicine that call forth unstinted admiration and affection. But I have some doubt whether the tremendous demands upon his time, his habits of work and his habits of thought, and the discursiveness of his occupation do not to a large extent disqualify him for the timeconsuming and detailed type of examination that has been outlined as necessary for a periodic health examination. It is this very inability of the general practitioner to take care of the increasing details of clinical medicine that has led to the development of the specialties, and it seems to me that a properly conducted health survey must carry so much of detail with it as to demand the services of physicians who are especially equipped by training and experience for its performance.

The importance of preventive medicine has been recognized in all civilized nations by the organization of public health departments whose function it is to see that the scientific principles involved are duly applied, who must assume responsibility for its failures, and whose activities in this field have superceded those of the individual physician. This field of preventive medicine has been gradually expanding until we are faced with a genuine danger of the socialization of medicine. I am sure that many of these activities have been carried too far, both from the standpoint of public good and in the interests of the medical profession. But I am much of the opinion that periodic health examinations, if they are to be adopted as a national custom, are sufficiently close to public health activities in general to demand that some organized authority of the state or otherwise be placed in charge of the machinery involved, and made responsible for its proper functioning.

LIPOID NEPHROSIS*

By F. Eugene Zemp, M. D., Columbia, S. C.

Nephrosis or tubular degenerative nephritis is characterized by degenerative changes of the kidney involving especially the tubules, and is separated from the inflammatory diseases, which involve chiefly the glomeruli, the glomerulo-nephritides, and the diseases which are primarily due to arterio-sclerosis, the nephroscleroses. The term nephrosis was first used by Fr. Muller in 1905 and in 1913, Munk reported several cases of primary degenerative nephritis which he thought corresponded to Muller's conception of nephrosis. In 1914, Volhard and Fahr adopted the term nephrosis for the degenerative affections involving the tubules and gave two conceptions, a clinical and a pathological. The clinical one characterized by a chronic course, edema, oliguria, and albuminuria, and by the absence of hypertension and renal insufficiency. The pathological one included all forms of tubular degeneration, such as cloudy swelling, fatty and hyaline degeneration, necrosis of the tubular epithelium, and the amyloid kidney. They then separated specially characterized nephrosis and necrotic nephrosis as distinct diseases. Volhard found in his genuine nephrosis, fatty degeneration of the convoluted tubules, and Munk, a little later, found in his cases corresponding

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clinically to Volhard's genuine nephrosis, double refractive lipoids in the urine and lipoids in the cells of the convoluted tubules, so classified such cases as lipoid nephrosis. In 1922, Fahr concluded that the term nephrosis should be used as a generic term to include all forms of tubular degeneration, and the term lipoid nephrosis, as corresponding to his and Volhard's cases of genuine nephrosis. Epstein uses the term chronic nephrosis to signify chronic tubular degenerative nephritis, but in his series of cases he did not separate lipoid nephrosis from the other forms of tubular degenerations and many of his cases showed nitrogen retention.

Linder, Lundsgaard and Van Slyke, in their series of fifteen cases of genuine or lipoid nephrosis, as described by Volhard and Fahr found a reduction in the total plasma protein of the blood, with a typically low albuminglobulin ratio. They also found an increase in the cholesterin content of the blood, and reported cases with cholesterin as high as 0.730 per cent, which has been confirmed by Epstein and Lande, and Schwarz and Kahn. In 1923, Bennhold found that after intravenous injections of congo red in nephrosis, that forty-seven to fifty-five per cent of the dye disappeared from the blood in one hour, and that it appeared in the urine at the end of the first and second hours, whereas, in individuals with normal kidney tubles, only eleven to thirty per cent disappeared in one hour, and none of the dye was excreted by the kidner. No mal values were also noted in glomerular nephritis and nephrosclerosis. Boyd and Fahr have recently expressed their opinion that they think the hyper-cholesterolemia in lipoid nephrosis is an expression of some primary disturbance of metabolism involving the whole organ and in which the kidneys merely play a part.

From the preceding remarks, we may then define lipoid nephrosis as a metabolic disease of unknown etiology with special pathology in the tubules of the kidneys, and characterized clinically by an insiduous onset, usually, a chronic course, edema, oliguria, proteinuria, hyper-cholesterolemia, a reduction of the total plasma protein, with a low albumin-globulin ratio, a positive congo red test and the presence of hypertension, albuminuric retinitis, cardiac hypertrophy, and nitrogen retention. Lipoid

nephrosis may occur alone or in combination with nephritis and amyloid disease. The case selected below is of uncomplicated lipoid nephrosis with typical symptoms, physical and laboratory findings.

Case 4074. (The Physiatric Institute, Morristown, N. J.)

History.—L. B., age 42, a stoker, gave a negative family and past history except for measles and whooping cough in childhood. On December 25, 1926, while firing the furnace, he was overcome with carbon monoxide gas, from which he recovered in three hours. The next day, he noticed slight swelling of the ankles. The following day, it had become more marked, and was also noticed in the epigastrium. During the two succeeding days, edema extended up both legs and thighs. On the fourth day, his testicle and penis were swollen. The edema of his legs and thighs increased considerably, making the skin very tense. There was no visible edema of his face, arms or eve lids. On the sixth day, he entered a local hospital, at which time, certain negative symptoms were of importance. There was no headache, dizziness, aches, dyspnoea, nausea, vomiting or temperature. There was slight impairment of vision and "lack of pep." His blood count showed a leucocytosis of 19,000 white blood cells, and urine, heavy albumin and casts. He was placed on a diet, low in protein, and somewhat restricted in salt, but milk was given freely. He also received nephritin and potassium citrate. He remained in the hospital until February 2, 1927, during which time, there was some improvement in the edema, and his general condition. Soon after leaving the hospital, he became worse, and on March 8, came to the institute complaining of weakness, anorexia, slight dizziness, slight nausea, and was slightly dyspnoeic, at which time, the important findings were as follows:

Physical examination.—Well nourished male, with slight puffiness and pallor of the face. Lips pale but not cyanotic. Pupils were normal in size and shape, and reacted promptly to light accommodation. Eye grounds showed a haziness of nasal margins of the discs. Nose and throat negative. Lungs negative. Heart action normal. Cardiac dulness extended 8 cm. to the left from the midsternal line in the fifth interspace. There were no murmurs. Ab-

domen was negative. All reflexes reacted normally. The temporal and brachial arteries were not appreciably sclerosed. There was moderate pitting edema of the ankles, over the tibia, and in the epigastrium.

Laboratory examination on admission.— Height 5 ft. 01/2 in.; weight, 1451/4 lbs; blood pressure, systolic 118, diastolic 74. Blood: Negative Wassermann reaction; hemoglobin, 84 per cent; red blood corpuscles, 4,320,000; color index, .9+ per cent; white blood count, 7,200; normal differential count and normal blood smear. Chemical analysis of the fasting blood showed: sugar, 107 mg.; urea, 48 mg.; plasma chloride, 614 mg.; creatinin, 1.5 mg.; cholesterol, 385 mg. per 100 cubic centimeters; acetone negative; serum, total protein, 6.08 gms. per cent, consisting of albumin, 2.85 gms. per cent and globulin, 3.23 gms. per cent; albumin-globulin ratio, o.88 per cent; fibrinogen was greatly increased.

Urine: Specific gravity, 1.012; negative for sugar; protein, 8 gms. per liter, a large proportion of which was found to be globulin and the rest albumin; double refractive lipoids were found in the sediment which also contained a few pus cells, epithelial cells, and an occasional hyaline and granular cast. The sodium chloride output for the first 24 hours was 2.1 gms. The congo red test showed an excretion of four plus the first hour, and four plus the second hour. Volhard water test showed an output of 215 cc during the first four hours, the diluting period, with lowest specific gravity of 1.006. The total output for the 24 hours was 553 cc. The highest specific gravity was 1.036.

Course under treatment.—He was placed on a diet consisting of 30 gm. of protein, low fats, (20-30 gm.) and carbohydrates, grams sufficient to make 2500 calories, and strictly saltfree. He remained on this diet for seven days, during which time, the sodium chloride output in the urine dropped to 0.7 gm. per day, and protein, 5 gm. per liter. He lost 5 3-4 pounds. The plasma chloride at this time was 544 mgm. and urea, 20 mgm. The protein constituent of his diet was then raised to 60 gm. per day on which he remained for twelve days. At the end of this time, the daily sodium chloride output in the urine had fallen to 0.23 gm. and albumin, 7 gm. per liter. The plasma chloride was now 564 mgm., urea, 30 mgm., creatinin,

1.3 mgm. His weight was 1381/4 pounds, showing the 21/4 pounds further loss. Another water test was done at this time. The output during the first four hours was 160 cc. The lowest specific gravity was 1.010. The total output for the 24 hours was 621 cc. The highest specific gravity was 1.036. He left the institute on March 29, 1927, four days later. At this time, the daily sodium chloride output was 0.3 gm. and protein 6 gm. per liter. The plasma chloride was 568 mgm., urea, 32 mgm., creatinin, 1.2 mgm. His weight was 1371/4 pounds, and blood pressure, systolic 120, diastolic 78. The edema had entirely cleared up, he was generally improved, and free of the symptoms complained of on admission.

Progress after leaving the institute.—He remained on the same program and at intervals, a water test was done. On April 14, 1927, he stated further improvement in his condition. The water test at this time showed an output of 130 cc. for the first four hours, and a total output of 374 cc. for the 24 hours. On May 11, his condition was about the same. The water test showed an output of 98 cc. for the first four hours, and a total output of 437 cc. for the 24 hours. On July 21, he reported considerable improvement, had gained considerable strength, and had had no further return of edema. The water test at this time showed an output of 315 cc, for the first four hours. and a total output of 660 cc. for the 24 hours. This indicated a considerable improvement in the water metabolism.

General Discussion

(a) The Cause: The etiology of lipoid nephrosis is unknown, but it seems plausible that in this case, the carbon monoxide poisoning was the direct cause. It is known that when carbon monoxide enters the blood through the lungs, it forms with the coloring matter, a close compound, thus destroying its function of carrying oxygen to the tissue cells. This function depends upon the reversible dissociation of oxy-hemoglobin—HbO. The compound with carbon monoxide HbCO, is only very feebly dissociable, and therefore, imparts an exceedingly poisonous character to an atmosphere containing more than 0.1 per cent. Therefore, if such a condition occurred in the blood, it would interfere with Internal Respiration, and produce a temporary asphyxia of the cells of the body, and if kept up for a certain length of time, the cells would die in due time and degeneration would take place just the same as it does when Internal Respiration is interfered with by a diminution of the blood supply due to a spastic contraction of the arteries producing an area of ischemia, in anemia, passive congestion, edema, etc. The histopathology of the kidney in carbon monoxide poisoning is negative, although fatty degeneration and infiltration of the tubules occur in those diseases of the blood and circulatory system, in which general nutrition suffers and in poisoning by phosphorous, arsenic, sublimate, etc.

(b) The Findings: The absence of the symptoms of nephritis on admission to the local hospital, and certain negative physical findings mentioned, were of great importance as they alone would make one think of nephrosis and not nephritis. The symptoms on admission to the institute were due to the generalized edema of the internal organs. Rapid sedimentation occurred when the blood was withdrawn from the vein, indicating high fibrinogen. (Nageli, Saloman). The test tube was examined after standing awhile and was found almost completely filled with fibringen leaving very little plasma and indicating an anhydremia. The slight increase in urea was due to extrarenal factors. The plasma chloride of 614 mgm. indicated a good prognosis (Allen, F. M.). The two most important findings of the blood was the cholesterol of 385 mgm. (normal 140-180 mgm.) and a reduction in the total plasma protein, 6.08 gm. per cent, with the low albuminglobulin ratio of 0.88 per cent (normal 1.6 gm. per cent, Van Slyke). The urinary findings were typical of this condition; the marked proteinuria, a large proportion of which was globulin, and the rest albumin, the high specific gravity and the presence of double refracted lipoids. The positive congo red test indicated a definite tubular lesion, as none of this dye is excreted in patients with normal kidney tubules. The total sodium chloride output during the first 24 hours in the institute was 2.1 gm., indicating that he had not been on a strictly salt-free diet before admission. The water test showed a marked delay in excretion due to extrarenal factors interfering, but the excellent concentrating and diluting power of the

kidney ruled out any serious glomeruli involvement.

- (c) Course under Treatment: The initial diet consisted of: protein, Gm. 30; fat, Gm. 20-30; carbohydrates, grams sufficient to make 2500 to 3000 calories per day and strictly saltfree. The protein was restricted to 30 gm. on account of the blood urea of 48 mgm, and the danger of a sudden increase due to concentration when put on a strictly salt-free diet. He lost three pounds during the first two days which was due to water alone as indicated by the urine volume of 1600 cc and 1500 cc with a sodium chloride output of 2.1 gm., and 1.1 gm., on March 8-9 respectively. The caloric value of his diet was far in excess of the body requirement. There was another water loss of three pounds during the next four days, and at this time, the daily sodium chloride output had reached the amount desired, namely 0.5 gm. The blood urea was now 20 mgm., so the protein content of his diet was raised to 60 gm. and he remained on this program until discharge, March 20. During this period, there was another water loss of three pounds, the daily sodium chloride output remained under 0.5 cm. and the urea normal. The water test still showed a marked delay in excretion but his edema had entirely disappeared, he was free of the symptoms complained of on admission, and felt much stronger and improved. The blood pressure was normal on all occasions, the systolic never going above 120 and the disatolic 78.
- (d) Diet: Dietotherapy surpasses all the fo.ms of treatment and the diet which has been found to give the most satisfactory results in uncomplicated nephrosis at the institute, consists of protein, Gm. 60-80; fat, Gm. 20-30; carbohydrates, grams sufficient to make a total caloric value of between 2500 and 3000, (unless the patient is obese), strictly salt-free, with a fluid restriction of 1000-1500 cc per day.

Volhard and Munk give liberal protein. Epstein recommends a diet high in protein, (120-250 gm.), low in fat, (20-40 gm.), low in carbohydrate, low in salt, and with a caloric value of 1280 to 2500. He believes that the edema is caused by a decreased osmotic pressure of the blood, resulting from the diminution of the protein content of the plasma due to loss in the urine; and that by giving a high protein diet.

the osmotic pressure will be increased by the restoration of the blood proteins and the edema will disappear. But, Howe says that the slowness with which the serum proteins are regenerated, after a plasmapharesis, is believed to be sufficient proof that they are not actually concerned as transition products of protein metabolism between food product and vital tissue protein; on the other hand, Kerr, Hurwitz, and Whipple have shown in their experiments on dogs after a plasmapharesis, that the globulin was produced more rapidly than the albumin, regeneration was faster with food than with fasting, and faster when meat was given than bread and milk. Therefore, whether or not the blood proteins can be regenerated by high protein feeding, is not definitely decided. Epstein restricts the carbohydrates to exclude a greater production and retention of water which is incidental in carbohydrate metabolism, and to cause a maximum assimilation of proteins. Fats are restricted because of the lipemia, and water and salt because of the reduced power of the kidneys to excrete these substances, and of the profound disturbance of the water-salt interchange of the body.

Van Slyke in his series of fifteen cases, did not find any direct relationship of the cause and effect between low-protein concentration of the plasma, and presence and degree of edema, so does not advocate high protein diet. He also found fat metabolism to be normal, but believes that there is a disturbance in the mechanism of transfering lipoids from the blood to the tissue depots.

Elwyn gives high protein on account of its specific dynamic action causing an increase in general metabolism of the cells as proven by Lusk, low fats, liberal carbohydrates and a restriction of salt and water.

Allen does not believe in high protein feeding and says the theory is unsound, for carbohydrates and fat spare protein effectively, so that a normal person, on 60 gm. of protein a day and adequate calories will never have any lack of protein for forming muscle, blood plasma or corpuscles, or any other needs. And if a patient loses on 20 gm. of protein in the daily urine, the remaining 40 gm. still suffice for every normal requirement. Evidence that protein feeding stimulates the formation of blood protein should not be ignored in a condition

where there is presumably an abnormal demand upon this function. But, neither should we overlook that we are dealing with a renal-vascular abnormality, which makes high protein feeding particularly risky.

All agree that a restriction of salt in the diet is beneficial but Allen distinctly specifies that it should be restricted to such an extent that the total daily output of sodium chloride in the urine should not be more than 0.5 gm.

(e) Medicinal Therapy: Eppinger gives thyroid extract in large doses, (1.3 to 1.8 gm. per day) as he found a low basal metabolic rate in his cases. Epstein uses it in associated myxoedema. McCann has recently obtained successful diuresis of water and salt in edema by the use of parathyroid extract-Collip. Digitalis is useful when there is an accompanying myocardial insufficiency in order to improve the renal as well as the general circulation, and thereby increase diuresis. Diuretics are not indicated, but they may be tried when dietotherapy fails. The following drugs for oral administration are recommended: Caffeine citrate, potassium citrate, potassium acetate, diuretin, theocin, and theocalcine. Diuretin and theorin have been found to be the most valuable. Better results have been obtained by intravenous injections of drugs having a marked osmotic effect, causing a mobilization of the edema fluid from the tissues into the blood vessels so that diuresis can take place. The following drugs are recommended: Potassium acetate ten per cent solution, euphyllin, magnesium sulphate, novasurol, and salargyn. The last two are mercurial preparations and should be used with extreme caution. They are contra-indicated if there is the slightest evidence of nephritis, but may be of value if lues is present.

Summary

- 1. Lipoid nephrosis should not be confused with other forms of nephrosis.
- 2. Carbon monoxide poisoning is offered as a cause.
- 3. The congo red test is of use as a routine measure in diagnosis.
- 4. The most satisfactory diet consists of: Protein, Gm. 60-80; fat, Gm. 20-30; carbohydrates, grams sufficient to make a caloric value of between 2500 and 3000, unless the patient is

obese, strictly salt-free, and with a restriction of fluids to 1000 to 1500 cc per day.

5. Diuretics are not indicated unless dietotherapy fails.

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DISCUSSION:

Dr. J. H. Cannon, 72 Wentworth St., Charleston: Just a little over one hundred years ago Richard Bright described the disease which now bears his name. Virchow and his associates, in an effort to classify the different types, divided

the cases into interstitial and parenchymatous nephritis. That classification has held sway even to the present day. There are a good many men now, however, who feel that that classification has probably done a considerable amount of harm, in that while it has apparently been satisfactory, since our knowledge of the disease and its pathology and the efforts to correlate the clinical cases with the pathology indicate and demonstrate that the classification by Virchow and his associates has not been sufficient. Various classifications have been offered since that time. One of the most widely known at the present time is that of Valhard and Fahr. The case as reported by Dr. Zemp in his paper here illustrates the necessity for a different classification, because it is impossible to classify all cases as parenchymatous and interstitial.

Dr. Zemp deserves our thanks for bringing to us such an excellently worked up case. He demonstrates that the more thoroughly you work out a case, the further you do work it out, the further the horizon seems to extend.

Frederick V. Muller, in 1905, first advanced the conception of lipoid nephrosis. Since that time Epstein has pointed out that occasionally a case of this type does occur in our practice, and it behooves us to be on the guard for this type of case. It is a rare condition, apparently. I say 'apparently," because the probabilities are that there are a great many more of these cases that get by us. Once we recognize them and are on the lookout for them, we shall probably find that they will become more common as our ability to recognize them increases.

A point I wish to mention is the way in which the high protein diet, as advocated by Epstein, acts. Epstein's view is that by reason of increasing the osmotic property of the blood the edema will be reduced. Others do not believe that, and they advocate the giving of urea, believing it is the urea in the high protein diet that aids in the elimination of fluid. At the Dallas meeting of the A. M. A. Epstein showed that enormous quantities of thyroid extract are needed in some of these cases. Some require as much as twenty to thirty grains a day and at times thyroxin to produce results.

Dr. Walter Russell Mead, Florence: As Dr. Cannon has said, Dr. Zemp has brought to the association a very rare kidney condition. At the Washington meeting of the American Medical Association, Christian reported from Boston that he had never seen a case which he could diagnose as lipoid nephrosis. McElroy, of Memphis, said that in a very large series of cases at the clinics he had been able to point out only sixteen cases.

With respect to the treatment, Dr. Zemp has taken the conservative course, recommending

moderate protein, low fat, and moderate carbohydrate. This seems more rational than the high protein advocated by Epstein. I have tried the high protein diet in one case, where the result was very disappointing. This patient since died. Dr. Zemp's case has apparently been restored to good health, which confirms the general belief that the prognosis in lipoid nephrosis is comparatively good. My own belief as to a fav-

orable outcome in lipoid nephrosis is less sanguine, not only because of the fatal case above referred to but because of the high mortality reported from Carney Hospital in Boston. Marriott, of St. Louis, believes that Staphylococcus infection, as in the sinuses in children, predisposes to nephrosis, whereas Streptococcus infection predisposes to true nephritis.

PEDIATRICS

R. M. POLLITZER, M. D., GREENVILLE, S. C.

With the onset of hot weather this year there has been the usual epidemic of summer diarrhea. We doctors see annually many cases of infantile diarrhea. Some patients are slightly affected, many are quite ill, and a relatively small percentage die. Nevertheless because of the high incidence of the disease the loss in life is not inconsiderable.

Diarrhea is so common and has been seen by all of us for so long a time that it fails to excite us. The majority of men still treat the disease without any consideration of our more recently acquired knowledge.

There has been considerable investigation in the past few years as to the etiology, and therefrom we have obtained a few ideas that seem fairly well established. There has appeared during this year one article especially that is in the modern style. This, by W. C. Davison (South. Med. Jour. May, 1928, XXI-5), is well worth reading. It is clear and practical. According to him many of us still fail to differentiate between dysentery and other diarrheas. The chief diagnostic points of dysentery are: The sudden and abrupt onset, the high fever, and the bloody and purulent stools.

The vast majority of diarrheas are not dysentery. They belong to a group that needs greatly to be sub-divided, and about which much study is still lacking. In their consideration we must not lose sight of the fact that while parenteral infections, especially those of the kidney, the nose, the ear and the mastoid may bring about a diarrhea, yet in the greater number are originated or set off by high ex-

ternal heat and the decomposition of food in the duodenum. This type of case (whether called summer diarrhea, infantile diarrhea ileocolitis, colitis, or infectious diarrhea, etc.) is the one that is so commonly seen and that gives us so much trouble. Of course bacteria play a part, but after all the hot weather or sudden climatic change seems to be the chief factor. Davison, Moro and others are of the opinion that there is also a decrease or abscence of digestive ferments in the upper intestine. Lloyd Arnold (Arch. Pediat. Feb., 1927, p. 71. and Jour. Am. Med. Asso., Sept. 2, 1927, p. 789) states that high external temperature with relative humidity interfering with the heat regulating mechanism, produces bodily changes. One of these is the increase of internal heat, with a consequent reduction of the hydrochloric acid secreted by the stomach. As a result there is a decrease of acidity in the upper intestine. (Or too great an alkalinity). Thus the normal bacteriolytic substance is not elaborated there and organisms ordinarily killed or inhibited, flourish. In this way diarrhea and other bacterial diseases may be initiated.

In the way of prevention, the intake of food during hot weather should be limited. Babies should be more scantily clad; though chilling must be avoided. During the greater part of the day they must avoid the direct sunlight, even though the profession and the laity, particularly, are most anxious that they secure a coat of tan.

Easily fermentable foods such as candy and other sweets should be limited. It should go

without saying that the milk and water supply must be suitable. Milk that is brought to the home cold and not promptly put in an ice box, has a rapid and tremendous increase in bacteria. It is a wise measure throughout the Summer at least to boil all milk for babies. In some places the water too should be boiled.

Of course, even so, diarrhea occurs. Breast fed babies contract diarrhea. It has not been proven that this is not an infection, but the evidence tends to prove that it is due to temperature chiefly. On the other hand some of these are definitely secondary to infections of the nose and throat. (In all pediatric work nothing ever takes the place of the physical examination.) Given a case of summer diarrhea, what is the best plan of procedure?

The situation should be briefly explained to the mother, in many cases her fears being allayed, in others it is necessary that she should be stirred to greater zeal. A very important step is to have her make daily records in separate columns of the number and character of the stools, of the amount of food taken each time, of the amount of water by mouth, and in a fourth column of any noteworthy symptoms. Any woman of even slight intelligence. provided she can write, will do this and do it accurately.

The greatest advance in the treatment in these cases lies in the recognition that death may often be prevented by overcoming dehydration. Formerly the majority of lives were lost because of water starvation. Water by mouth is often vomited. By the bowel it is rarely held long enough, and proves too disturbing to the patient. Under the skin only small amounts can be given, and great pain is produced. So that when the need is great and time presses we put the fluid (most often normal salt sol.) into the peritoneal cavity.

It is surprising how great an improvement comes about in the appearance within a short time. Of course one intra-peritoneal injection may not, and usually does not suffice. Three or even six, may be required, but as a rule one or two are sufficient to turn the tide. In the

hands of some, transfusion has been of greater benefit. Theoretically it should be of value, but in some instances even that fails. too, time is required for the matching of bloods. so that it can not be instituted as promptly as an intraperitoneal. Further, the procedure is at times difficult. Much had been written as to the kind of food to be given. Early, when there is vomiting and fever, it is well for 12 to 24 hours to give no food. Later some of the caloric needs must be satisfied. However, there is a tendency and a temptation, where the youngster will take food, to overload the digestive system, thus increasing its burden. Fat is usually not well borne. Protein most often helps to bring about some constipation. A milk high in protein, and, at times, one containing lactic acid, is of benefit.

However, where the protein causes vomiting or brings about frequent undigested stools regardless of the type of the diarrhea we should swing around to a high carbohydrate food. Sometimes water with orange juice for a day or two is of great benefit. Dextri-maltose, Mellins food, Horlicks, etc., in solution for a short period are helpful. Of course prolonged they are bad. There are some who use too much paregoric, while other make the serious blunder of never prescribing it. Where the stools are very watery, or where there is much pain, it helps considerably. Where the temperature is high and there is great toxemia it should be avoided.

The guide to the progress of the case is the condition of the baby, his appearance, the dehydration and the signs of toxemia, rather than the number of stools or the amount of blood therein. Drugs do little good. It is a question whether bismuth helps. At times simple irrigations seem to be helpful. On the other hand they often cause great struggling with prostration.

These is no question but that we still have much to learn of the treatment of infantile diarrhea. It is also true, that many cases to-day, even with our scanty knowledge and limited ability, can be greatly helped.

EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

EAR HINTS

Geo. B. McAuliffe, M. D., New York City

Never accept the patient's statement offhand that he has an earache. If he is ignorant he often confounds tinnitus with pain.

Pull the pinna and press the tragus. If it hurts, the canal is the cause of or contributes to the earache (except in babies and very young children).

If the drumhead is normal and the otalgia is obscure in its origin, look for adenopathies in the neck pressing on the great auricular nerve, (from cervical plexus) for herpetic vesicles in canal or on the pinna coupled with a slight nerve deafness, showing herpes of the facial nerve; for growths on the gums; for cancer of the larynx; have an X-ray for impacted teeth, (or infections in the tonsils.) These are occasional causes.

Tinnitus is sometimes caused by tonsillar plugs as well as by low and high blood pressure.

Vertigo may more often come from constipation and cardio-vascular disturbance than from labyrinthine disease. The patients will show a prolonged nystagmus and an excessive falling reaction.

In myringotomy, the pain comes more from the initial pressure of the knife, disturbing the ossicles, than from cutting. This is demonstrated in thick or atrophic drum. Therefore, try to cut without much pressure. The physiological incursion of the drum membrane is one thirtieth of an inch. If you can get your thrust to approach that you will minumize the pain.

If you are without local or general anesthetics try sometimes pressure on the carotids until the extremities tingle. By thus inducing cerebral anaemia you may diminish the sensation of the pain of cutting. This applies to cutting elsewhere.

Ear drops are of no avail in earache except

when the menstruum is thick and heavy. This supports the sagging drumhead. The medicaments generally incorporated are not absorbed through the cutaneous layer of the membrane. Therefore, their use is fatuous.

A few drops of cocaine solution (isotonic) blown into the ear through a Eustachian catheter will give some anaesthesia of the anterior half of the drum membrane.

In dry coughs make sure there is nothing pressing on the floor of the canal inducing a pneumogastric reflex. (Through Arnold's nerve).

Pruritus is sometimes caused by the hair in the canal. Use oil or vaseline to flatten them.

Itching is best relieved by painting the external auditory canal with 20% nitrate of silver and by the home use of boroglyceride-25%, or one part of nitrate of mercury ointment to seven parts of oil.

In syringing the ear use water at a temparature of 102. By the time it reaches the membrane it will be 100—the temperature of the endolymph. This obviates caloric disturbance of the semicircular canals.

The ordinary forms of eczema do well with the ointment composed of carbolic acid—5 or 10 drops, resorcinol and salicylic acid—20 grains each, zinc exide—one dram and lanoline and oil, enough to make a soft ointment of one ounce.

The position of the aural patient should be with the head high and face towards the pillow to minimize congestion and help drainage.

Boric acid solution is useful in the ear and eye not because it is antiseptic but because it is generally isotonic.

Soften wax with a 2% solution of sodium hydrate. It tends to saponify it.

In inflation, by means of the catheter, in order to prevent the tip of the bag from sticking in the catheter use a piece of soft rubber tubing over the bag tip until it leaves one-half inch of the tip exposed. When it is in-

serted into the catheter, the rubber will impinge on the end of the catheter, thus preventing locking.

In ordinary mastoiditis it takes about two weeks for the bone to break down. Give nature a chance to resolve the inflammation.

No middle ear inflammation should have a temperature after two weeks. If there is, it shows pocketing of the infection generally in the mastoid.

In making the initial incision for mastoiditis close to the pinna, slope the knife backwards. The cartilaginous canal will not be scored.

In using the curette always scrape from above downwards and from behind forwards. Dura and sinus are thereby protected.

Use a suction tip instead of sponges. It does not bruise and will get rid of detritus better.

No mastoidectomy can be done in a sterile manner. But when through, be sure to make the field sterile by H₂O₂ and alcohol. You will rarely see any post operative temperature.

Incipient otosclerosis is generally benefitted by arsenate of soda given in large doses. Onesixth of a grain t. i. d. for six days. Repeat the course every month unless the stomach rebels and gradually increase the length of each course of treatment when you have studied your patient's reaction.

Parts in parenthesis added by abstractor.

ANNUAL METING OF THE COUNCIL ON PHARMACY AND CHEMISTRY

Among the questions considered, those of special interest to the medical profession were: It was decided to cooperate with the Committee of Pharmacopeial Revision in studying the activity of a digitalis preparation for hypodermic use offered for the Pharmacopeia. It was decided that unless new evidence develops, to exclude all digestive enzyme preparations from New and Nonofficial Remedies with the close of 1020. It was decided to omit all desiccated pituitary preparations from New and Nonofficial Remedies with the close of the longest period for which any such preparation now stands accepted, unless before then new evidence for their value becomes available. The Council discussed the available evidence for the value and rationality of a mixture of a barbital compound, marketed as such and found acceptable, with an analegesic such as

amidopyrine, provided such a mixture is marketed under a name descriptive of its composition and the claims made for it are supported by acceptable evidence. The Council voted to recommend to the Board of Trustees that the distribution of New and Nonofficial Remedies to medical classes be resumed. It was decided to ask the general manager to mark distinctively in the American Medical Directory those journals which will promise to limit their advertising of proprietary medicines to those accepted for New and Nonofficial Remedies. The Council proposes to offer its cooperation with a view to examining all food preparations (except natural foods in their natural state) proposed for advertising in A. M. A. publications. The Council considered the question of the importation of non-narcotic drugs now barred by the Narcotic Drug Import and Export Act. (Jour. A. M. A., April 28, 1028, p. 1377).

OBSTETRICS AND GYNECOLOGY

R. E. SEIBELS, M. D., COLUMBIA, S. C.

BACKACHE

As reported by Adams, backache is one of frequent complaints of pamost tients coming to a gynecologist. Records of 943 consecutive patients were examined and of these 243 complained of backache alone, or in conjunction with other complaints. In 50 cases, retroversion was assigned as the cause of backache, and in 60% of the cases correction of the displacement relieved the symptoms; but in 14 cases there was no relief. These 14 cases were studied further and it was found that upon giving them supportive corsets and abdominal exercises 11 were cured or greatly relieved. Eighty-four per cent of those with pelvic relaxation were relieved by appropriate operative measures and abdominal support. Fibroid tumors were present in 90% and in each instance where the tumor was removed backache was cured. In the cases of cervical laceration with erosion and endocervicitis, 80% were cured of the backache by treatment of the cervix with the electric cautery. Twenty-three per cent of the patients with backache showed poor posture and general atonicity of the masculature, and all patients in this group who followed the general hygienic measures, such as resting, outdoor exercise and proper abdominal supports were relieved of backache, and in a number of the other cases, where operative procedure had not relieved or had only improved the backache, proper supports and appropriate exercises completed the cure.

There was one cause of backache, which in our experience is not infrequent, not mentioned by this author. That is inequality in the length of the legs. We have seen a variation of as much as three-fourths of an inch, and by building up one shoe and reducing the height of the other heel, have produced immediate relief. It seems to us that no examination is complete in which backache is a symptom, without taking this measure. We believe that a movable retroversion is but rarely the cause of a backache, and it has been

our experience that when we have gotton relief from an operation for retroversion that was movable it not infrequently seemed that the rest in bed, following the operation, and the hygienic mode of life during the convalescence, had more to do with curing the backache than changing the position of the uterus.

Another very frequent cause of backache in this State is chronic malaria, and the editor can state from his own experience that malarial infection can give a disabling backache, which quinine promptly relieves.

Adams, T. W.: "Backache from an Obstetric and Gynecologic Standpoint." Am. J. Obs. & Gyn., 1927, XIV, 742.

Exercises

These exercises are designed to build up the musculature in general and that of the abdomen in particular. The benefit derived will depend on the regularity with which they are performed and the vigor put into them. The results may be measured directly by recording the changes in the body. Weight once a week, measure the abdomen at the naval, measure the chest—at rest, at inspiration and at expiration and record these.

Exercise in a room that is airy—in winter, one that is cool but not shivery. Have a clock in plain sight and exercise by time. Begin with 5 minutes night and morning and increase to at least 20 minutes each day. Do not over do it the first few days and give it up the second week.

When possible, other exercises should supplement these, golf, tennis, and walking. Motoring is not included.

All exercises to be done slowly and with resistance by the opposing muscles. Exercise before a mirror and try to stand correctly and to keep the body taut. Wear loose clothing—a one-piece bathing suit is comfortable.

How to stand. Heels together, toes out, legs straight, chin up. Do not try to "hold the shoulders back"; take a deep breath filling the chest in this position and the shoulders will be

correctly held. Hold the abdomen in. This is the starting position and will be assumed after each standing exercise.

Take six deep breaths between each two exercises.

- 1. Inhale slowly and at the same time raise the arms from the side till the hands are over head, stretch up, raising on the toes and reaching up with the fingers—trying to increase the reach and to take in more air. Exhale slowly, bringing the arms down to the sides. Repeat three times.
- 2. Hands on hips, fingers to the front, elbows back. Bend forward from the hips until the right angle is reached, then back as far as possible, six times.
- 3. Clasp hands over head, elbows straight. Bend forward slowly and slowly revolve the body on the hips, to the left, rear, right and front three times.
- 4. Hands on hips. Sit down on heels with the body erect and lift on toes with the knees wide apart. Bend forward, pressing the body against the knees. Rise to standing position, three times.

- 5. Lie on back on floor. Fold the arms over the chest. Raise the right leg with the knees straight, keeping the other heel and the had on the floor. Lower and repeat with the other leg. With each leg three times.
- 6. While on the back, fold the arms, keep the legs straight, rise slowly to sitting position and slowly back, six times.
- 7. Turn over on the abdomen. Place the hands on the floor near the shoulders and with the body held straight, raise up so that the weight rests on the toes and hands; lower down to but do not touch the floor, three times.

After these exercises have been done a few times so that they can be done easily, increase the number of times each is done until the allotted time is taken up.

Knee-chest exercise. Twice a day, before arising and after retiring. The head rests on a pillow, the chest is brought as close as possible to the bed and the legs are drawn up so that the hips are as high as posible, the weight resting on the knees and chest. Keep thighs vertical. Relax the abdominal muscles and take 12 slow, deep breaths.

DRUG ADDICT CURES

Narcosan for the cure of drug addicts, about which both the newspapers and the medical journals gave much space in the daily newspapers in December, 1926 (see this Journal, Feb. 1, 1927, page 144), has been used quietly in some of the City hospitals of New York. The New York Herald-Tribune of June 26 carries the announcement that Mayor Walker has appointed a committee to study the problem of the treatment of drug addiction. Narcosan is among the remedies to be investigated.

"The committee consists of Dr. William R.

Williams, chairman; Dr. Mathias Nicholl, Jr., State Commissioner of Health; Dr. Louis I. Harris, City Commissioner of Health; Dr. Menas S. Gregory, head of the Bellevue Hospital psychopathic ward; Dr. Israel Straus, chairman of the Jewish Mental Health Society; Dr. Linsley R. Williams, director of the New York Academy of Medicine; Dr. Nathan R. B. van Etten, past-president of the State Medical Society; Dr. Stanley R. Benedict, of the Cornell University Medical School; Dr. Thomas A. McGoldrick and Dr. Alexander Lambert."

—N. Y. Medical Journal.

SOCIETY REPORTS

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, JUNE 12TH, 1928, AT 8:30 O'CLOCK.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Doctors Beach, Beckman; Bowers, Burn, de Saussure, Chamberlain, Jackson, Jenkins, F. B. Johnson, Kollock, Maguire, Mitchell, Mood, Richards, Rhame, W. M. Rhett, Rutledge, Sanders, W. A. Smith, Townsend, R. Wilson, Prioleau. (22).

Guests: Dr. R. H. Lanning, U. S. Navy; Dr. Stubbs, of New Jersey.

The minutes of the meeting of May 22nd were read and confirmed.

The Secretary read a letter of application from Dr. Floyd L. Echols, United States Public Health Service. His application was referred to the Board of Censors.

Under Reports of Officers and Committees, Dr. G. McF. Mood, Chairman of the Board of Commissioners of Roper Hospital, made the following report:

The President and Members of The Medical Society of South Carolina.

Gentlemen:

Your Board of Commissioners, appointed to conduct the affairs of Roper Hospital, wish to submit a partial report upon the affairs of the hospital for the year ending December 31st, 1927.

The complete report will consist of the addition to the present one of a complete printed copy of the Superintendent's report, which will be furnished to each member of the Society, just as soon as it is received, your Board wishes to state that the Hospital has been run during the year at a total expense of \$295,090.31. This may be divided up as follows:

Out Patient Department		19,902.35
Total	\$	91,376.60
Roper Hospital Proper	-	203,713.71

Riverside Infirmary __ ___\$ 71,474.25

\$295,090.31

The cost of care of patients in the Hospital amounted to ______3.28 per diem In Riverside Infirmary ____5.02 per diem

The income of the Hospital and Riverside from pay patients was as follows:

· · · · · · · · · · · · · · · · · · · ·		2
	*****	****
Roper pay patients per diem	_\$	3.90
Riverside patients per diem	_	5.91
Riverside Infirmary cost	71,4	74.25
Received from Riverside patients	79,4	50.84
Profit	\$ 7,9	76.59
This was used for the care of free	patien	ts at
Roper:		
Other souces of income		50.84
Roper Pay Patients	37,10	07.98
County of Charleston	25,0	00.00
Duke Endowment	53,0	43.00
Ross Estate	20,0	00.00
Out Patient Department		
Special Donations		00.00
Alston Bequest	. 3	86.80

Total		50.87
To this should be added the appro-		
priation of the city for care of		
pauper cases		
Bringing the total appropriation to		50.87
Subtract this from the total cost for		
the year 1927		
And it will be seen that the Hospital		
was conducted at a net loss of		
Against this were outstanding pa	itients'	ac-
counts:	0 1 5	00 10
Riverside		
Roper	_ 2,0	98.05
In the special accounts:	0.	71.13
Shirras Fund	2	72.95
Ross Estate		72.95 81.50
Nurses' Home Fund		
Harmon Fund		7.69
Duke Endowment Fund	1.59	
Duke Endowment Fund	_ 1,0	20.42
Total	\$20.5	56 16
		70.10
Total cash in possession of Hospital	917.7	16 79
December 31st, 1927	-911,1.	10.72

During the year following repairs and improve-

New Laundry machinery at cost of __\$ 2,969.40 Fire Escapes (3) _______ 1,800.00

Purchase Price of 1 Lucas St. ____ 11,000.00

Heating and Plumbing, 1 Lucas St. _ Electrical Wiring, 1 Lucas St. ____

New Furniture, Nurses' Home and

Internes' Quarters

Purchases Price of 393 Calhoun St. __

pensary Trustees _____

Improvements in Out-Patents' Department paid for by Shirras Dis-

2,622.77

1,385.10

1,000.00

892.75

ments were made:

There are many improvements yet to be made in the building, all of which are on file, and will be taken up in order of necessity or desirability, as enough money accumulates to care for them. Your Board hopes that many of them will be completed during 1928, at the end of which year they will be reported.

Your Board wishes to state that signed copies of the Superintendent's report and of the Roper and Riverside audits, have already been handed to City Council, as the printers were waiting for them, even before their completion.

It desires herewith to hand to you a signed copy of the Roper Hospital report, together with an audit of Roper Hospital by Mr. C. L. Vann, C. P. A., and an audit of the Hospital's Special Funds, by the same accountant.

Respectfully submitted, G. McF. Mood, M. D., Chm. Board of Commissioners.

(These reports filed under Roper Hospital, Board of Commissioners).

It was moved, seconded and carried that the report be received as information, and that the Board of Commissioners be thanked by the Society for their valuable services.

Under New Business, Dr. Robert Wilson discussed the matter of the "Cost of Medical Care." He stated that he had been appointed as a member of the Committee of the American Medical Association. This committee, appointed by the National Association is for the purpose of making an exhaustive study into all phases of the problems of medical care, which are receiving considerable thought by members of the medical profession and laymen throughout the country. A five year program of study is being outlined. Funds are being received from some of the foundations to aid in the accumulation of this data. Dr. Wilson stated that he desired to call the attention of the members of this Society to the work of this committee, as they would probably from time to time receive questionnaires, some of which might seem too personal, but it is important to obtain the facts if benefits and results from the study are to be derived.

The Scientific Program was called at nine P. M. Dr. D. L. Maguire reported a case of undescended testicle, outlined the operation performed, and exhibited the patient. Discussed by Drs. W. A. Smith, Rhame, Bowers, Dr. Maguire closing.

The paper of the evening was read by Dr. R. H. Lanning, U. S. Navy, the subject being "Treatment of Ulcers." His paper emphasized the value of Unna's Dressing. He exhibited several cases in which the methods employed had been most successful.

There being no further business, the meeting adjourned.

W. Atmar Smith, M. D., Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, MAY 22ND, 1928, AT 8:30 P. M.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Doctors A. E. Baker, A. E. Baker, Jr., B. R. Baker, Banov, Beach, Burn, Byrnes, Cain, de Saussure, Jackson, Jenkins, McCrady, Maguire, Mitchell, Moore, O'Driscoll, E. F. Parker, Pearlstine, Plowden, F. R. Price, Richards, Rutledge, Sanders, Scharlock, J. E. Smith, W. A. Smith, Taft, Townsend, Walsh, Waring, Prioleau. (31).

Guests: Dr. R. H. Lanning, U. S. Navy.

The minutes of the meeting of May 8th were read and confirmed.

The Secretary reported that he had sent telegrams to both the United States Senators and the Representative from this District, as instructed by the Society, protesting against the increase in the narcotic tax, and read an excerpt from the Journal of the American Medical Association, which said that the bill to increase this tax had been defeated in the Senate on May 15th.

The Secretary brought to the attention of the Society the illness of Dr. W. H. Price, and moved that the dues of Dr. Price for the current year be remitted, and that Dr. Price be carried as a regular member of this Society during that period. This was seconded and carried.

The Scientific Session was called at 9:00 P. M. Dr. W. H. Prioleau exhibited a case of substernal Thyroid, upon which he had successfully removed this gland, and discussed the diagnosis of the case. This was discussed by Drs. Maguire, Smith, and Beach, Dr. Prioleau closing.

Dr. M. S. Moore and Dr. A. E. Baker reported a case of Tic Douleaureaux. The medical aspects of the case were shown by Dr. Moore, Dr. Baker giving the surgical treatment and exhibiting the nerves removed. Dr. Baker, in discussing a series of twenty cases of this disease which had come under his observation, brought out the various steps in the evolution of the operative treatment. Discussed by Drs. Scharlock, O'Driscoll, E. F. Parker, Dr. Baker closing.

There being no further business, the meeting adjourned.

W. Atmar Smith, M. D., Secretary

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SO-CIETY HELD IN THE DIRECTORS' ROOM OF THE CHAMBER OF COMMERCE, MON-DAY, JUNE 4TH, 1928.

The meeting was called to order by the President, Dr. P. Joseph Johnston at 8:30 P. M. with about 40 members present. The reading of the minutes of the last meeting were dispensed with owing to the absence of the Secretary.

The President then called for reports of clinical cases. Dr. Grimball reported a case of acute mononucleosis with a small lymphocyte count of 97%, and a polynuclear count of 3%. Following drainage of the middle ear the polys. ran up to 33%. Convalescence showed an increase in both the poly. and mononuclear (large) counts.

Dr. Pollitzer then reported a case of acute meningitis which on differential proved to be of influenzal type. Such a meningitis is peculiar to infancy and is not considered to be communicable.

Dr. Davis reported 2 cases of bifurcation of the ureter with double kidney, with a pyelitis of the upper kidney. The second case occurring in a negro woman practically duplicated the former case.

The President then called upon our guests of honor, Dr. Walter Meade and Dr. James McLeod of Florence, S. C.

Dr. Meade presented an excellent paper on "Interesting Cases of Purpura." Dr. Meade presented the following varieties as occurring in his series:

A case of Henoch's Purpura.

A case of Purpura Rheumatica.

A case of Purpura with Neoarsphenamine toxaemia progressing to death.

A case of Purpura with an idiopathic aplastic anaemia.

Discussed by Drs. Richardson, Carpenter, J. M.

Fewell and Hugh Smith. Closed by Dr. Meade.

Dr. McLeod then presented an interesting paper on "Cases of Puerperal Anaemia." Dr. McLeod termed these cases as febrile anaemia of the puerperium. His series consisted of 36 cases studied over a period of 3 years. He stated that the response to blood transfusion was quite dramatic and very satisfactory. Discussed by Drs. Guess, J. M. Fewell, Hearin, Bruce, Hugh Smith, Meade, W. S. Fewell, Kluttz and Grimball. Closed by Dr. McLeod.

The application of transfer of Dr. Roy D. Metz from the Sumner Co., Kansas, Medical Society was presented.

The application of transfer of Dr. M. L. Peeples from the Hampton Co., S. C. Medical Society was presented. Dr. Hugh Smith moved that these applicants be elected to membership in the Greenville County Medical Society; seconded and carried unanimously.

There being no further business, the meeting adjourned.

Hugh Smith, M. D., Acting Secretary.

RIDGE MEDICAL SOCIETY MEETING

The Ridge Medical Society met last week at the office of Dr. W. P. Timmerman.

The attendance was not as large as usual, but more than usual interest in the meeting was manifested. An interesting feature of the meeting was a paper on diseases of and the proper care of the feet, by Dr. D. M. Crosson, of Leesville. This paper was read before the meeting of the ladies auxiliary and the doctors and elicited much discussion and favorable comment.

After the business meeting the ladies auxiliary was the guests of the doctors for supper at the Rutland Hotel.

W. P. Timmerman, M. D., Reporter.

ARGYROL OMITTED FROM N. N. R.

Argyrol is included in New and Nonofficial Remedies as a brand of mild silver protein, U. S. P. At the expiration of the period for which Argyrol stood accepted, the Council on Pharmacy and Chemistry informed the A. C. Barnes Company that the advertising claims for therapeutic efficacy of this product went beyond those of mild antiseptic or protective value allowed for mild silver protein and asked that the firm present evidence to substantiate these claims; the firm was also informed that

in order to permit the continued acceptance of the product the labels and advertising must bear the pharmacopeial title, mild silver protein, as a synonym. The firm presented no satisfactory evidence for the therapeutic claims in question and refused to mention the pharmacopeial name on the labels and advertising of Argyrol. The council therefore voted to omit Argyrol from New and Nonofficial Remedies and authorized publication of its report explaining this action.—Jour. A. M. A., March 17, 1928.

WOMAN'S AUXILIARY

South Carolina Medical Association

OFFICERS

Mrs. W. H. Nardin, Anderson, S. C.	President
Mrs. W. A. Able, Columbia, S. C First Vi	ce President
Mrs. D. S. Pope, Columbia, S. C Second Vi	ce President
Mrs. I. H. Grimball, Greenville, S. C Recording	ng Secretary
Mrs. Frank Wrenn, Anderson, S. C Co	r. Secretary
Mrs. J. R. Miller, Rock Hill, S. C Publicit	y Chairman

COUNCILORS

Mrs. W. G. Gamble, Jr., Charleston, S. CFirst	District
Mrs. Ben Wyman, Columbia, S. CSecond	District
Third District to be Appointed.	
Mrs. J. W. Bell, Walhalla, S. C Fourth	District
Mrs. W. J. Dunn, Camden, S. C Fifth	District
Mrs. E. M. Hicks, Florence, S. CSixth	District
Mrs. Carl B. Epps, Sumter, S. CSeventh	District
Mrs. L. A. Hartzog, Olar, S. CEighth	District

ACHIEVEMENT OF SOUTH CAROLINA WOMAN'S AUXILIARY MAKES GOOD IM-PRESSION AT NATIONAL CONVENTION.

South Carolina's Medical Auxiliary was congratulated at the National Convention on its work for the past year. Characterized as unique and worthwhile its efforts and success in its plans for erecting a monument to a native son and famous surgeon, J. Marion Sims.

Mrs. W. G. Gamble, Jr., of Charleston, S. C., delegate to the National Convention in Minneapolis representing the South Carolina Medical Auxiliary reports a full meeting of business and pleasure.

On June 11th, the president's breakfast for the executive board and special guests. Reception and tea at the Art Institute and Dinner at the Nicollet Hotel that evening.

Tuesday, a deluxe tour of the twin cities. Wednesday at the Automobile Club, 15 miles out among the lakes, the business sessions took place with Mrs. McReynolds of Texas presiding. Mrs. Bunce, president for the coming year, who hails from our sister state, Georgia, was installed. That evening a box party at Shubert's theatre took place. Thursday drives to various country clubs, golfing and boating on the lakes were the order of the day. That evening the reception and dance in honor of the president of the A. M. A. took place, and closed the convention. On Wednesday at the business session there were

over 1,000 women registered from all parts of the United States and foreign countries. The reports of the various states were heard. These were of a varied nature from promotion of the subscription to Hygeia, Hospital aid, social contact between physicians, health work, etc. South Carolina was however lifted out of the general reports as different and eminently worthwhile in that the energies were devoted to honoring a man who had made the world a safer place for womankind.

It is regretted that more South Carolina women could not attend the Convention and see the place it is taking in helping the Medical profession but it is hoped that next year at Portland Oregon there will be a good attendance.

Mrs. Gamble reports that the outstanding addresses to the ladies were made by Dr. Lula Hunt Peters the noted Dietition, Dr. Jabez Jackson and Dr. Thayer.

ROCK HILL AUXILIARY MEETS

The last meeting of the Rock Hill Ladies' Auxiliary to the Medical Association was held at the home of Dr. and Mrs. C. B. Ward on Confederate Avenue. The reception room was most attractive with vases of summer flowers. Here seven ladies responded to roll call.

The president, Mrs. J. R. Miller, gave a most interesting report of the state meeting which was held in Columbia, after which the regular program of the afternoon was taken up. Mrs. J. E. Massey contributed a very interesting and instructive paper on "Malaria," telling the cause, prevention, and treatment of this common disease.

At the conclusion, the hostess assisted by Miss Orr, served a delicious ice course.

The organization decided to disband during the hot summer months and to resume study in October.

Mrs. W. E. Simpson, Secretary.

MINUTES

MINUTES—HOUSE OF DELEGATES—THE SOUTH CAROLINA MEDICAL ASSOCIATION, COLUMBIA, TUESDAY, APRIL 17, 1928—(Continued).

The House of Delegates met in the ball room of the Jefferson Hotel at nine p. m. and was called to order by the President, Dr. D. LeSesne Smith, of Spartanburg.

The chairman of the Committee on Credentials reported a quorum present.

Presdent Smith read his message to the House of Delegates, after which the Secretary-Treasurer, Dr. E. A. Hines, made his report. (Published in June issue).

Dr. S. E. Harmon, Chairman of the Board of Councilors, made a report on the South Carolina Medical Journal and then made the following supplementary report:

"Your Council met this afternoon at two o'clock with all members (including the President) present except the councilor from the eighth district.. That councilor is present now. Judging from the reports of the various councilors, conditions are in general harmonious and peaceful, although we note a large percentage of eligible physicians who are not members of organized medicine. This is deplorable, and we urge greater activity in increasing scientific work and membership in our various societies.

"The Council went on record as approving a resolution presented asking that the medical profession record themselves as requesting that the Medical Practice Act be revised so that all physicians shall be examined every five years. That resolution was presented before our body this afternoon and discussed, and the Council approved the principle. The resolution will be presented to you this evening.

"The Council also ruled that ex-presidents shall be eligible for election to any office.

"We find that the year just past has been the best in the history of the journal. After careful consideration it was determined that Provence, Peace & Martin, Printers, of Greenville, gave the best bid; hence that company was awarded the contract for another year.

"The Council also recommended that the revised model constitution as recommended by the American Medical Association be adopted and that the details be worked out by a special committee on constitution and by-laws to be appointed by the president.

"Last year at Anderson the Council was asked for a ruling on the question of whether a doctor in charge of an advertised cut-rate laboratory should be a member of organized medicine. After considering the matter from every angle the Council passed the following resolution: 'Resolved: That this Council go on record as condemning any advertising in any form of any cut rate from any hospital or laboratory and that such advertising is violating the principle of medical ethics.'"

The individual councilors read the reports for their districts, as follows:

First District ______ Dr. J. H. Cannon Second District _____ Dr. Sam'l E. Harmon Third District _____ Dr. T. L. W. Bailey Fourth District _____ Dr. R. C. Bruce Fifth District _____ Dr. Jas. R. DesPortes

Sixth District _____ Dr. Charles R. May Seventh District _____ Dr. T. R. Littlejohn Eighth District _____ Dr. J. L. Folk

Dr. William Weston, Chairman of the Committee on Scientific Work, was called upon for his report and stated that he had none to make.

Dr. Robert Wilson read the report of the State Board of Health.

Dr. Marion H. Wyman, Chairman of the Committee on Legislation, made the following report

"The only legislation of interest to doctors passed this year is the legislation on sanitary privies. That law provides that if a householder lives within five hundred yards of another house he has to have a sanitary privy. There was also a law passed providing that cotton mills must have either sanitary privies or satisfactory sewage disposal plants.

"The chiropractic bill came up this year and went through the House of Representatives like a whilwind before we even realized it. I am going to have printed in the journal in my report exactly how every representative from every county voted. From that you can find out how the man from each county stood on this bill. The bill was overwhelmingly defeated in the Senate.

REPORT OF THE COUNCILOR OF THE FIRST DISTRICT

I beg to submit a report of the First District as follows:

Your Councilor has attended each County Society at least once during the year and feels that the District is in an excellent condition.

As a whole, the meetings have been well attended. The papers have been of a very high order, and a closer relation, among the men has been established. I have no doubt but that the coming year, with the improved roads in our District, will result in a much better attendance that has ever been possible in the past.

Colleton County has asked the Faculty of the Medical College for an extension course to be given in the near future, in which it is expected that the Beaufort-Jasper and Dorchester County Societies will participate and I feel that this will prove to be a great stimulus to that part of the District.

There were two meetings of the First District during the past year which were largely attended. The programs on both occasions were well filled and the papers were excellent.

In January, Berkeley County Society was organized with a total enrollment of six (6) which was 100% for that County. The attendance was sixty per cent as reported by the secretary. At a meeting of the society, which I recently attended, there were fourteen physicians present. Several interesting papers were presented which were discussed by those present. A very valuable feature of this meeting was an invitation to those present, extended by Williamsburg County Society to attend their next meeting. The attending of adjacent County Societies' meetings, I feel, most valuable and will result in stimulating one in his own Society.

Every effort is being made to encourage members from the smaller towns to present papers, report cases observed in their practice and to participate freely in the discussions. Reports from the secretaries of each society report only eight eligible physicians in the District, not members of a society, two ineligibles, three Chiropractors and one osteopath, and two illegal practitioners of regular schools. Average attendance of all county societies in district was fifty-five per cent.

I feel the scientific activities of the Medical Society of South Carolina (Charleston County Medical Society) deserves mention. There were sixteen meetings with average attendance of forty-three per cent. Quite a few out of town visitors, the Senior Class of the Medical School and Internes of the several hospitals of the city. There was one Clinico Pathological conference. Twenty-three case reports and exhibition of specimens, nine papers read by local members, and eight out of town guests who presented papers as follows:

Visitors: Dr. W. A. Mulherin, Augusta, Ga.; Dr. W. L. Dunn, Asheville, N. C.; Dr. Geo. H. Bunch, Columbia, S. C.; Dr. E. A. Hines, Seneca, S. C.; Dr. J. Shelton Horsley, Richmond, Va.; Dr. J. Dougal Bissell, New York, N. Y.; Col. W. L. Keller, United States Army; Admiral E. R. Stitt, United States Navy.

The most important and outstanding piece of legislation passed by this Society during the year was the bill to be presented to this body for consideration on expert medical testimony.

Respectfully, submitted,

J. H. Cannon, M. D.

REPORT OF COUNCILOR OF SECOND DISTRICT

I herewith submit my annual report as Councilor of the second district, comprising the counties of Aiken, Edge-field, Lexington, Richland, and Saluda. We have only three associations in our district: Aiken, Richland or Columbia, and the Tri-County or Ridge Association which comprises the counties of Edgefield, Lexington, and Saluda.

I have visited all associations, and suggested to the Aiken Association that they investigate the advisability of their uniting with the Ridge Association. Nothing developed along that line and I have had very little response from them.

The Tri-County or Ridge Association has twenty-seven members on roll, meets every two months, has nineteen eligibles not on roll, no illegals, average attendance, fifteen.

Richland or Columbia Association has one hundred and three on roll, twelve meetings, average attendance, thirtyfive, two irregulars, no illegals except Quacks, three eligibles not enrolled.

Aiken County Association for some reason did not send me a report.

We find that the Tri-County Society idea works out very satisfactorily and we heartily recommend this plan to small county associations.

Respectfully submitted,

Sam'l E. Harmon, Councilor of Second District.

REPORT OF COUNCILOR OF THE THIRD DISTRICT

I beg to submit my report for the Third District of the Medical Association.

I am pleased to report that our district is in live working order. We are composed of Abbeville, Greenwood, Laurens, Newberry, and McCormick Counties. I did not get an annual report from McCormick. This county is handicapped by having so few doctors living in the county. All the other counties report a high standard of excellence in monthly meetings and average monthly attend-

We have enrolled in the district seventy-three members. We had forty-two meetings during the year, with an average attendance of ten. We have nine regular physicians that we have failed to enroll. I say "failed to enroll" because we have used strenuous efforts to enroll them. We have two chiropractors reported in the district, and one since then has removed. We had a splendid district meeting at Newberry the past year, and we shall go to Greenwood for the next meeting place.

Newberry reports special meetings with county-society banquets, which add a great deal to the interest and social feature.

We have five splendidly equipped hospitals in the district, providing ample hospital service for the respective counties in which they are situated.

I am glad to report our district as one of the most up-to-date and efficient associations in the state, and it is our intention to keep it so.

Respectfully,

T. L. W. Bailey.

REPORT OF COUNCILOR OF FOUTH DISTRICT

As Councilor of the Fourth Medical District, I beg to submit the following report:

Score cards were received from the following Counties: Oconee, Pickens, Union, Anderson, Spartanburg and Greenville. No report was received from Cherokee County. These reports set forth the following facts, which are respectfully called to the attention of the Association:

Oconee County reports society meetings held quarterly with an average attendance of ten and a total enrollment of 15. One meeting was held jointly with the Woman's Auxiliary in the interest of Sim's Memorial Fund and the promotion of a County Hospital. One meeting was devoted to periodic Health Examinations An interesting program was presented with several visitors reading papers. All eligible physicians are enrolled. There is one illegal practitioner and one chiropractor in the County.

Pickens County reports twelve meetings with a total enrollment of eighteen and an average attendance of sixty per cent. The meetings are held at various points in the county instead of in one town in order to facilitate a good attendance. Three eligible physicians are not enrolled. There are no chiropractors, osteopaths or illegal practitioners in this county.

Anderson County reports eleven meetings during the year with a total enrollment of fifty-three and an average attendance of twenty-five per cent; these meetings are always followed by a luncheon. There are six eligible physicians not enrolled; three chiropractors, no osteopaths and no illegal practitioners.

Union County reports one meeting during the year which was devoted to the election of officers and organization, no scientific meetings being held. This Society has a total enrollment of thirteen; there are no chiropractors, osteopaths or illegal practitioners in the county.

Spartanburg reports twelve meetings during the year and a total enrollment of forty with an average attendance of fifty per cent. There are reported to be forty-seven eligible physicians not enrolled, with three chiropractors, two osteopaths and no illegal practitioners.

Greenville County reports twelve meetings during the year; a total enrollment of ninety-one with an average attendance of forty per cent. Varied programs are carried out, the custom being to invite distinguished speakers from other localities. There are three eligible physicians not enrolled; four chiropractors, four osteopaths and two illegal practitioners.

From Cherokee County there is no report.

There are 313 eligible physicians in the Counties comprising the Fourth District, with an enrollment of 238. The total enrollment of 238 physicians in this District represents twenty-nine per cent of the total enrollment for the State of South Carolina, the total State enrollment being given as 808 in the early part of 1927. There are, as may be seen, seventy-five eligible physicians in this territory who are not members of organized societies which represents, roughly speaking, twenty-five per cent of the

total number enrolled. It would seem that efforts should be made to increase the enrollment of eligible physicians in this territory. Spartanburg County stands out conspicuously in this lack of enrollment, as forty-seven eligible physicians in this county are reported as not being enrolled. It is gratifying to know that Oconee County has an enrollment of 100%. There are but three illegal practitioners in the Fourth District; eight chiropractors and an equal number of osteopaths.

The following societies were visited by your Councilor during the year: Oconee, Pickens, Cherokee and Spartanburg. Cherokee was visited in company with your Secretary, Dr. E. A. Hines, and we found there a complete organization existing; no meeting, however, had been held for some time, though the members seemed interested and felt that they would be able to begin regular meetings with scientific sessions. However, as stated, no report of any such activities has been received up to this time. The other societies are in excellent condition holding regular meetings with scientific sessions, with the exception of Union County which has held only one meeting during the year for the purpose of organization.

The Fourth District Medical Association meeting was held at Greer, in September, 1927, where an interesting and helpful program was carried out. The attendance was gratifying. The meetings of this Association are always interesting and instructive and are well attended by the members of the various County Societies.

No efforts have been made against illegal practitioners or other irregulars for the reason that there are so few of them that their activities are practically negligible. It would seem best that our efforts should be largely directed to the proper organization and functioning of the various societies embraced in the District.

All of which is respectfully submitted,

R. C. Bruce, M. D.,

Councilor, Fourth Medical District.

REPORT OF COUNCILOR OF FIFTH DISTRICT

Fairfield County has five members, and held one meeting at which all of the members were present.

Lancaster has no report.

York County has a membership of thirty, held six meetings during the year, the average attendance being fifteen to eighteen. There are two or three eligible physicians not on roll.

Chester County has fourteen members on roll which takes in all the eligible physicians in the county. There has been one meeting during the year with an attendance of eight doctors.

Kershaw County has twelve members on roll which includes all the eligible physicians in the county. They have had twelve meetings during the year with an average attendance of ninety-five per cent. This Society is to be commended on its good report. Each doctor entertains the Association at his home. At this time a paper is read and difficult cases that the physicians have attended during the month are discussed. Often a physician from another association is invited to the meeting.

The Fifth District held no meeting during the year.

Jas. R. DesPortes, M. D., Councilor.

REPORT OF COUNCILOR OF SIXTH DISTRICT

The Counties of Florence, Darlington, Chesterfield, Marlboro, Dillon, Marion, and Horry make up the district. The Pee Dee Medical Society, which meets yearly at Florence, is the official district society, it always has a large attendance and has well selected programs.

Florence County Medical Society: Dr. E. A. Simmons, Timmonsville, President; Dr. E. E. Herlong, of Florence, Secretary. Has twenty one members enrolled. Mcets quarterly. Average attendance, twenty. Sixteen eligible physicians not on roll. No Chiropractors, one Osteopath, one graduate but not licensed.

Darlington County Medical Society: Dr. J. McIver Wilcox, Darlington, President; Dr. Julian Coggeshall, Darlington, Secretary. Has thirteen members enrolled, meets semi-monthly. Average attendance, ten. There are six eligible physicians not on roll. Two of which expected to join. No Chiropractors, no Osteopaths, no illegal practitioners, one Homeopath.

Chesterfield County Medical Society: President, Dr. J. S. Gaskins, Mount Crogan; Secretary, Dr. R. J. Coney, Cheraw, Has thirteen members enrolled. Meets semi-monthly, average attendance, six. There are four eligible physicians not on roll. No Chiropactors, no Osteopaths, one illegal practitioner. Chesterfield has one meeting in the open every year generally a fish fry, and invites men from the nearby counties. One that attends the meeting is always glad to be invited again.

Marlboro County Medical Society: Dr. C. C. Craft, Clio, President; Dr. D. D. Strauss, Bennettsville, Secretary. Have fifteen members enrolled, meets quarterly, also has one extra meeting in January each year. The attendance at the last yearly meeting was 106. There is a regular average attendance of seven. No illegal practitioners. There are two eligible physicians not on roll. No Osteopaths, one chiropractor. Marlboro County was successful in their recent Hospital Campaign, sixty-six thousand dollars being raised by public subscription, and the Duke Foundation will give twenty-five thousand dollars to the building fund.

Dillon County Medical Society: Dr. D. M. Michaux, Dillon, President; Dr. F. L. Carpenter, Latta, Secretary. They have eleven members on roll, two meetings a year, average attendance, seven. No illegal practitioners. One physician (col.) not on roll. One Chiropractor, no Osteopaths.

Horry County Medical Society: Dr. J. S. Dusenbury, Conway, President; Dr. J. D. Thomas, Loris, Secretary. They have eleven members on roll, with an average attendence of six. Two eligible physicians not on roll. No Chiropractors, though one visits the county occasionally. No Osteopaths, no illegal practitioners. Horry Society is taking an active part in procuring a County Hospital.

Marion County Medical Society: Did not return the score card so I can give no accurate information concerning them. This Society with Dillon and Horry have formed a Society called The Eastern Carolina Medical Association, which is generally largely attended, and they always have an attractive program, and good things to eat. If the delegate is here, would be glad to see him after this meeting, and get the data from him to finish this report.

Respectfully submitted, Charles R. May, Councilor Sixth District.

REPORT OF COUNCILOR FOR SEVENTH DISTRICT

Sumter County: Twenty members on roll. Twelve meetings during the year. Average attendance at each meeting twelve. Five eligible members not now on roll. One chiropractor. No illegal practitioners.

Lee County: Ten members on roll. One meeting during the year. Average attendance of eight. Four eligible physicians not on roll. No chiropractors or osteopaths. No illegal practitioners.

Williamsburg County: Ten members on roll. Two meetings during the year. Average attendance at each meeting, seven. Five eligible physicians not on roll. One chiropractor. No osteopaths. One illegal practitioner in the county.

Clarendon and Georgetown Counties not reporting.

Respectfully submitted,

T. R. Littlejohn, Councilor.

REPORT OF COUNCILOR OF EIGHTH DISTRICT

The Eighth District is composed of the following counties: Allendale, Bamberg, Barnwell, Calhoun, Hampton, Orangehurg.

There is an organized and working society in all of the counties of the Eighth District with the exception of Calhoun, I have discussed the question of organizing a medical society in this county with a majority of the active practitioners living therein, I find that there are only five active men practicing in this county, and it was the opinion of each memher of the profession that with the limited number of Doctors that it would be a very difficult undertaking and almost impossible to organize and hold a society together.

All of them appeared to he favorable to a suggestion that if they could not maintain an organization in their own county that they place their membership with Orangehurg which is only a few miles from the majority of them, which has an active society of twenty-one members in good standing. I am inclosing the returned score cards from each county secretary which furnish the desired information.

Resectfully suhmitted,
J. L. Folk, Councilor Eighth District.

(Minutes to be continued)

:- NEWS ITEMS

Dr. Edgar A. Hines, Jr., of Seneca, a graduate of the Medical College of the State of South Carolina in the class of "28" made the second highest marks before the State Board of Medical Examiners of South Carolina with a percentage of 91. The maximum mark was 92½ won by Dr. C. E. Oxner of New Brookland, also a graduate of the State Medical College in the class of 1928. Young Dr. Hines has been connected with the Journal office at different times throughout his student career and is now serving an internship at St. Elizabeth's Hospital, Richmond, Va. The following is a list of phy-

sicians granted licenses by the Board of Med-

ical Examiners:

P. E. Assey, Georgetown; L. P. Barnes, Florence; L. K. Best, Columbia; B. H. Boyd, Columbia; A. C. Bradham, Manning; G. C. Brown, Jr., Walterboro; J. W. Chapman, Columbia; L. H. Coleman, Charleston; Monroe Crawford, Orangeburg; J. H. Cutchins, Greenville; J. T. Davis, Kershaw; A. M. Eaddy, Johnsonville; S. R. Gaston, Moore; H. P. Gongaware, Charleston; J. J. Graham, Derita, N. C.; E. F. Harrison, Brunson; W. A. Hart, Columbia; E. A. Hines, Jr., Seneca; J. I. Hoffman, Jr., Charleston; G. H. Klinck, Charleston; R. E. Lee Florence; M. H. Lynch, Lake City; W. W. McLean, Greenville; E. B. Michaux, Dillon; I. J. Mikell, Columbia; L. S. Miles, Charleston; C. J. Milling, Darlington; J. C. Moore, Jr., McColl; M. B. Nickels, Donalds; L. A. Nimmons, Columbia; James O'Hear, Charleston; C. E. Oxner, New Brookland; B. W. Palmer, Cartersville; W. T. Parker, McColl; A. S. Pearson, Woodruff; W. J. Rein, Charleston; G. S. Rhame, Camden; Adolph Ritter, Jr., Ridgeland; P. E. Sasser Conway; A. M. Shekamer, Columbia; W. H. S. Speissegger, Charleston; John Sughrue, Charleston; J. W. Tarrant, Jr., Lynchburg; J. P. Williamson, Spartanburg; H. F. Wilson, Bowman; I. R. Wilson, Jr., Charleston.

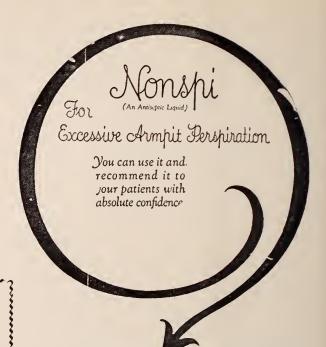
INTERSTATE POST-GRADUATE ASSOCIA-TION WILL MEET IN ATLANTA

For the first time in the South there will be held a medical association whose procedure is unique and of remarkable interest.

The Interstate Post-Graduate Medical Association of North America will meet in Atlanta, Ga., October 12th to 19th, inclusive. This association in 1926 met in Cleveland, Ohio, where nearly 5,000 practicing physicians were registered. At the Kansas City meeting last October 5,200 were registered.

Those who come to this remarkable sort of medical meeting will really be given a post-graduate course by the leading medical men of this country and abroad. The daily meetings are held from 7 A.M. to 1 P.M., from 2 to 5 P.M. and from 8 to 10 P.M. Every one who has attended these meetings has been amazed by the magnitude of the work done, by its quality, by the number of distinguished guests and by the remarkable interest aroused.

It is hoped that every physician in the Southern States who can possibly do so will plan now to attend this meeting. The only charge imposed on physicians who are in good standing in their county, state and national organization is a registration fee of \$5.00.



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Barefoot children on city streets and country roads are in constant danger of being cut by sharp stones or broken glass. Wounds and punctures of this type offer an excellent field for the development of the Tetanus organism—yet the child of today is more fortunate than those of the previous generation. Tetanus can be prevented by the prompt administration of Tetanus Antitoxin.

The approach of summer with its increased outdoor activity and its consequent dangers from infection with tetanus makes it advisable to have on hand one or two packages of Tetanus Antitoxin Squibb.

All breaks in the continuity of the skin, especially when deep, are well-known to be excellent media for the growth of the anaerobic tetanus bacillus. On the battlefields in France every wound, no matter how trivial, was considered a potential tetanus infection and the individual was immunized against tetanus by the use of antitoxin. This immunization practically eliminated tetanus in the World War.

In civil life also this danger exists, and the best practice is to prevent rather than to try to cure tetanus after it has developed. A simple subcutaneous injection of antitoxin gives this immunity. Tetanus Antitoxin Squibb is small in bulk, high in potency, low in total solids, yet of a fluidity that permits rapid absorption. It is remarkably free from serum-reaction producing proteins. Tetanus Antitoxin Squibb is supplied in vials or syringes containing an immunizing dose of 1500 units. Curative doses are marketed in syringes containing 3,000, 5,000, 10,000 and 20,000 units.

 $\[\]$ Write to the Professional Service Dept. for full information $\]$

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The Journal

South Carolina Medical Association

VOL. XXIV.

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NO. 8

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The Iournal

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EDITORIAL

THE STATE BOARD OF HEALTH AP-PEALS FOR ASSISTANCE IN SUP-PRESSING PELLAGRA

At the July meeting of the Executive Committe of the State Board of Health the rapid increase of pellagra in South Carolina was considered and both the Journal and the public press and the County Medical Societies were appealed to for cooperation in making a concerted attack on the problem. The United States Public Health Service was also called in to take part in the investigation. Dr. Goldberger an authority of national recognition was immediately detailed to come to South Carolina and advise with the health authorities in regard to the management of this outbreak of the disease. Indications are that pellagra has increased in other sections and is not entirely a South Carolina problem. We would suggest that one of the valuable ways of calling specific attention to the urgency of the matter is to have a meeting of each County Medical Society at once making pellagra the leading topic for discussion. The entire medical profession will thus be induced to concentrate their attention in such a way that speedier action will follow.

THE PEDIATRIC SEMINAR HOLDS PROGRAM IN GREENVILLE—SUC-CESS OF THE SEMINAR

Elsewhere in this issue will be found a report of the meeting of the Greenville County Medical Society at which several distinguished physicians from the faculty of the Southern Pediatric Seminar at Saluda, N. C., made important addresses. This is the ninth year of the Seminar and it is meeting with phenominal success. This year about one hundred physicians from all over the South attended the lectures. For the most part these were general practitioners from the smaller towns and cities whose attention has been arrested by

the rapid increase of the knowledge of not only the diseases of childhood but the prevention of diseases in childhood. There are about thirty members on the faculty of this institution, practically all of them professors of pediatrics in the leading medical schools of the United States. These men all serve without remuneration, giving their time freely to a great cause in the South. A large number of South Carolina physicians attended the Seminar.

OCONEE ESTABLISHES COUNTY HEALTH UNIT

Rural sanitation continues to grow in its scope in South Carolina under the direction of Dr. Ben Wyman head of this Department of the State Board of Health. One or more County Health Units are added each year until at present about eighteen or twenty counties are functioning. Oconee County has just inaugurated a full time unit with Dr. L. H. Jennings, formerly of Bishopville, as Director. In a few more years it seems reasonable to expect that every section of South Carolina will be amply provided with these County Health Units. Under the provisions of the Duke Endowment County Hospitals are being built and maintained which will be complementary in taking care of the people of the rural districts in sickness. Oconee County is engaged at the present time in a campaign to raise funds for the construction of a County

Hospital. We note that Marlboro has just bet the contract for a County Hospital to cost approximately \$75,000. Other counties are also active in this regard.

SECOND DISTRICT MEETS AT AIKEN

One of the most interesting district meetings held in the State this year was that of the Second District at Aiken in July under the Vice-Presidency of Dr. Wise of Saluda. As was suggested in an editorial in the July issue of the Journal we noted a large number of our official family taking part in the meeting. For instance, the Chairman of the Council, the State Health Officer, the Secretary of the State Medical Association, three members of the Executive Committee of the State Board of Health, the Director of Rural Sanitation, the Councilor of the Second District and perhaps others. While the attendance was not as large as in some other sections of the District the program appeared to make up in its practical aspects and intensity of interest for any falling off of numbers. The attendance was good however. The banquet served by the Aiken physicians left nothing to be desired along this line. The President Dr. Shealy was absent taking post graduate work in Baltimore and the genial countenance of Major Price Timmerman was missing owing to his call to the colors at Fort Moultrie for active training.

THE ILLINOIS INSTITUTE FOR JUVENILE RESEARCH

Nine family-welfare agencies in 14 cities and several State schools of Illinois, as well as clinics in Chicago had the cooperation of full-unit staffs of the Illinois Institute for Juvenile Research during the fiscal year 1927. Individual psychologists, psychiatrists, and psychiatric social workers were also frequently sent by the institute to give help where full-unit service was not essential. A traveling clinic, cooperation with the summer Better

Baby conferences where about 6,000 children are given mental tests, and research work in behavior problems are among the other activities of the institute. The research work is being conducted with the aid of the Behavior Research Fund, created by private citizens for the use of the institute during a five-year period. Among the experiments is one on animals to determine the relation between behavior disturbance and defects of intelligence or emotional constitution.

U. S. Children's Bureau.

ORIGINAL ARTICLES

THE PLACE OF AUTOPSIES IN MODERN MEDICAL PRACTICE*

By Kenneth M. Lynch, M.D., Charleston, S. C.

The autopsy is a court of scientific inquiry. To approach it with any shorter vision is to lose some of its value. That it usually enables the attending physician to more intelligently subscribe to a valuable death certificate is merely an incident in the occasion. The large purpose is the study of disease and the explanation of functional disturbances—of symptoms and signs of disease—that progress may be made in recognition of disease and in their prevention and cure.

In this country the importance of the autopsy has not been as well recognized as in Europe, and medicine has been that far behind European medicine. With us the autopsy is forbidden by law unless specifically permitted by the nearest of kin. In European countries it is a recognized procedure and is done unless specifically forbidden for sufficient reason.

In this country the gospel of more and better autopsies is finally telling and we are now witnessing a large movement in organized medicine in general, fostered by the American Medical Association, which will gather momentum and will be one of the greatest factors in medical progress in this country.

The autopsy is the foundation of modern medicine. Virtually all that we have in clinical medicine is based upon it. Through its medium we visualize disease, that which was hidden comes into view, diseases become objects instead of words, we picture instead of name. What we have to learn is tremendous. We are really just getting into position to appreciate what we see, to capitalize upon what has gone before.

There are two propositions in relation to the doing of necropsies in modern medical practice, one as related to the larger hospitals with pathology services by which the autopsy may be used to its fullest advantage in teaching med-

*Read by invitation before the South Carolina Medical Association, Columbia, S. C., April 18, 1928.

ical students, internes, and other graduates. The autopsy program in these institutions is receiving the greatest amount of attention at the present, and no doubt, ways and means will be found which will in the course of time place this part of our medical program at least on an equality with that of old world medicine.

The other relates to autopsies in private practice where such services are not available, in home practice and in the small community hospital, and this is the one to which I wish to draw your attention, because it is more applicable to the practice of most of the members of this association. There are very few hospitals of this State which can contemplate having expert pathological services. We are essentially a rural state, a state of rural communities, of small towns, of a few small cities at the best.

There are, however, a number of worthy small hospitals which serve our profession and its patients and the number of these will grow as time goes on. It is about the autopsies which should be done in and around these community medical centers which I am concerned at this time. In these hospitals there are, perhaps, some 1,000 to 1,500 deaths a year, in at least one half of which autopsies should be done. Consider the wealth of material thus lost to the physicians who might have obtained valuable knowledge from it for the taking. The material for a large postgraduate course is lost annually.

The problem is how to utilize this material, and in mapping out a program for its use there are several considerations.

The first and most important is the attitude and interest of the practitioner himself. It is my belief that once physicians admit the value they would receive from the little effort put out and the fact that priceless advantages could be theirs without cost, the remainder of the program would be easy. However, we are not, ourselves, out from the influence of emotionalism or, perhaps, even superstition in the mat-

ter of autopsies. We do not commonly have autopsies done on members of our own families. We do not anticipate that autopsies will be done on our own bodies. How then can we expect laymen to be different. Let us settle within our minds that autopsies are essential to the progress of the race and that there is no good reason for not doing them.

To reach the point of agreeing to an autopsy on the body of a member of ones family requires some emotional adjustment. We have long been accustomed to the most careful consideration of our dead. We abhor the thought of any hurt to the body, we take infinite pains to protect it from physical harm, at times even more than when it is alive. We are sensitive even to the thought of its lonliness in the grave. Hence the natural abhorence of the autopsy brought home to us. But it is only the savage estate where emotions govern action wholly and, while preserving the finer feelings, we must control our emotions instead of allowing them to control us.

The manner in which autopsies are done is an important consideration in this connection. It should be a dignified solemn occasion and respect, not only for the dead, but for the feelings of the living relatives should be prominently in evidence. The operation itself can and should be less repulsive than it commonly is. A thoughtful operator can perform an autopsy which jars the sensibilities but little. Too commonly the autopsy is a feat of gory bungling. A bloodless autopsy is a sign of good work, even as is a bloodless surgical operation. Care of the harm done to the body not only is an obligation to the relatives of the dead but to the embalmer who is to prepare the body for burial. The embalmer deserves to be considered in the matter and he will then be a help instead of a hindrance to autopsies. I have always found his embalming room and his help available and valuable in the care of autopsies done outside hospitals. Permission for the autopsy can often be obtained through him, not uncommonly when no one else can obtain it. On the other hand, antagonize him and he can prevent an autopsy. Let him say to the family that it would interfere with embalming and the autopsy is gone. I have had satisfactory cooperation from undertakers, black and white. Let them understand what autopsies are for, that they are not simply the product of idle curiosity, but for the benefit of the race, and they will cooperate. The autopsy done in private practice, outside the hospital, or in the small hospitals, must depend to a large extent on the undertaker.

When we have educated ourselves to the necessity for autopsies and enlisted the support and help of the undertaker, then we will need to consider the attitude of the laity. It is my belief that our failure to do autopsies is more the result of professional apathy than public antagonism. However, I have no doubt that some education of the public is necessary. Unless the indifference of the profession is corrected by us, the condition will be remedied by education of the public to demand autopsies, somewhat as is evidenced in the growing demand for periodic examination.

As to the manner of informing the public of the advantages in autopsies, the subject should be majored in our public lectures, such as are commonly given in connection with various medical conventions.

Further, the program of the profession should aim toward the establishment in law of the right of hospitals and physicians to do autopsies. It should be permitted by law instead of prevented. The state of South Carolina offers one of the best opportunities for such remedial legislation. The State Medical Association is well organized and conducted, its aim actively for medical progress, its members actively interested in better health and medical service for the people. It would be a most worthy and encouraging thing to see this Association and this State take the leadership in the matter of modernizing the legal status of autopsies.

As to the actual business of getting this piece of work done; in our larger hospitals it is squarely up to the hospital and the medical staff; in our small hospitals and in private outside practice it is also a feasible thing. Every hospital, no matter the size, should have a place where an autopsy can be properly done, and without cost. Every undertaker's embalming table should be available for the physician to do a postmortem examination. Autopsies can be done in homes but I think that cannot be

contemplated as a part of a program, the difficulties are too great.

Of course the full value of an autopsy will not be realized unless it is done by an experienced pathologist. However any of our members can perform such an examination as to get a large part of the important information out of it. What better program could be had for the smaller county medical societies, or for that matter, for the most of the meetings of our largest, than discussions of the clinical conditions and postmortem findings of the deaths within the practice of its own members—a clinical pathological conference at home.

It is not beyond the scope of possibility to have consulting pathological service, whereby microscopic examinations of such material may be made. Frequently such examinations are necessary for a correct interpretation of the case, always they are valuable checks upon gross findings.

There is a large vision to be had—practical and feasible in its details—whereby the profession of this state would do, not the fraction of 1% autopsies as is now the case, but 50% and more.

Let us look forward to it and work toward it. Let us make it a major aim of organized medicine in the State. When it is realized we will become an outstanding leader, not only in example to the world but in service to our people.

DISCUSSION

Dr. Thomas Brockman, Greer: Dr. Lynch has given us some valuable points to think about, and I have listened with a great deal of interest and satisfaction to his paper. His theme is timely; he has expressed his views in language we can understand; he has gotten down to the common sense of the thing. The best point and the strongest argument favoring routine autopsies is from a humanitarian standpoint, for the good of the race; because if left to the individual benefits too many of us would shrink from it. It is a fact that we have lagged far behind our professional brethren in the old countries. This condition, however, would obtain with all new countries.

In regard to the desirability of seeking autopsies as a routine measure through permission of the nearest relatives, if it were possible to have the same performed by a qualified individual I

believe there would be no dissenting voice in this audience, because under these conditions we have everything to gain and nothing to lose. I believe that a thorough and complete autopsy by one who has had no experience in such a procedure would serve no good purpose. Of course a man with limited experience could do an autopsy to discover the cause of death in some easily understood condition, such as found in acute and chronic abdominal cases. On the other hand, when it comes to passing a law taking away the right of a relative to prohibit an autopsy on one of his family, I am satisfied that it will be a good many generations before most of us redblooded Americans would submit without considerable ill feeling-and maybe bloodshed, if an attempt was made at doing the autopsy by law. I say this because there is yet present in us too much emotion and sentiment to permit what would be looked upon as mutilation of the deceased without any proximate or tangible benefit to be derived by the immediate family.

I have certainly enjoyed Dr. Lynch's paper. I know so little about the subject of doing autopsies that I want to thank him for bringing this subject before us.

Dr. George E. Thompson, Inman: One of the very few distinguished colored educators was once called upon to address the Southern Baptist Convention. He stood on the platform and looked over the sea of white faces and began his address by saying that he did not know why he had been invited to speak there unless it was to lend a little color to the occasion. Dr. Lynch's situation is so different from mine that I do not know why I was asked to discuss this paper, unless it was for the sake of contrast. Dr. Lynch lives down in Charleston, where they have a lot of good doctors and also have plenty of good material for autopsies. (Laughter.) I did not mean to imply that there is any connection between the two factors. Now, I live up in the Blue Ridge foothills, where people seldom die. fact, none of them die more than once. Smith tells me he once lived down in that geographical center of South Carolina known as "Hell Hole Swamp." He tells me that there in some instances it is the custom to place upon the grave of the deceased some of the bottles from which he took the medicine during his lifetime. Now, of course, where the cause of death is so obvious as in a case like that an autopsy (Laughter.) Now, when it is unnecessary. comes to preaching autopsies and teaching autopsies, Dr. Lynch means that in a way; but what he wants is to prevent the necessity of autopsies. Some of our greatest physicians were some of our greatest pathologists. No physician can successfully practice medicine and ignore the pathology. No man is one hundred per cent. correct in his diagnosis. I believe Dr. Cabot said if a man makes a correct diagnosis fifty per cent. of the time he is doing pretty well. If you'do an autopsy on your patient you have a chance to check up on your diagnosis. If you made a mistake that time, then maybe you will not make it the next time. Josh Billings said that everybody makes mistakes, but a wise man does not make the same mistake "twice."

I agree with Dr. Brockman that it would not be wise at this time to have legislation on this proposition. I believe that a great many people are amenable to persuasion. They want to know what their relatives died of and will consent to an autopsy if there is any doubt about it. Another feature is that if a good many of us made autopsies, sometimes we would get light from it and sometimes we would not. We have a man in Charleston, however, who is competent to teach us how to make these postmortem examinations, and I think if we can arrange to take a little pathology under Dr. Lynch we shall perform a service to our clientele.

Dr. E. W. Carpenter, Greenville: This paper is so valuable a one that I can not refrain from saying a word about it. We have never legislated anything into any people. We must first educate them, and it is Dr. Lynch's plea that we ourselves begin this program. He realizes more than anyone else our need of this work. Words as diagnosis are empty in the minds of most of us, but when we can visualize and see the pathological picture that causes the death of our patients we shall become more intelligent physicians. Now, it does not take a highly trained man to do a postmortem. Any country doctor can recognize the gross changes and can send specimens to Dr. Lynch, and when the doctors begin to do that they begin to be better doctors. With service cases it is easy to get a postmortem if you make an intelligent plea to the coroner for it. Get the coroner on your side and you can pop your fingers at the family. Most of us are afraid to insist on post mortem because we are afraid to lose the influence of the family.

Dr. Hugh Smith, Greenville: This is one of the best papers presented before this medical society in several years, and it deserves a lot of discussion. Dr. Lynch is not asking for legislation but is asking us as physicians to do two things: First, to catch the vision of autopsy and what it means to us, by thinking of autopsies on our own bodies in the future, possibly; and I do believe this, if the doctors themselves will accept the fact that a postmortem examination is really the one court of final appeal and is the only way in which we can tell what our diagnosis means, and if we then are willing that our own bodies might be the subjects of autopsies,

I am quite sure it will be a relatively easy thing to convince our patients (or at least a majority of them) of the wisdom and the advantage to be derived from postmortem examination. One of the great dangers in practicing medicine, I find, and I think it must be true, is that without a postmortem checkup we as physicians are liable to become 'too self-satisfied. Our word diagnoses, in our own minds, become infallible. am sure that one who has had considerable postmortem experience or who has had experience at any large teaching center will realize that the clinical diagnosis can only be verified by postmortem. It does seem to me that this plan which Dr. Lynch suggests is very good—that is, in the various hospitals throughout the state, in the smaller hospitals, and possibly in our county medical societies we could have probably at every meeting something in the nature of a clinical pathological conference. It certainly offers a great deal of information to any physician who will attend and participate in the discussions.

Dr. T. N. Dulin, Clover: This is one of the most important papers presented to the association since I have been attending. I can certainly indorse all of the paper except that part about bringing about legislation. It is impossible to legislate people into doing anything. think it depends upon the person in charge. I, for one, have advocated postmortem examination. If the physician has the respect of the family he will be able to get a postmortem in most cases. If the physicians advocate postmortems we shall get them. For instance, I sent a patient to a hospital. I diagnosed the case before it went there as locked bowels. An operation was not performed because it was too late. After the patient died we opened the abdomen and found the bowels tied in three places.

Dr. Arthur W. Browning, Elloree:

This is a very important subject, and I think it is up to the physicians of South Carolina to teach and tell the people the importance of confirming our diagnosis, if it is correct, and tell them of the importance to us in the future of finding out the real cause of death, if the diagnosis was uncertain. It is also important that we be ethical toward one another. For instance, if Dr. A has a patient postmortemed, don't go out and say, "Well, he did not know what was the matter with him, so he had it done." I have been practicing medicine for a number of years and know there is a certain amount of that to deal with. I myself should have liked to have postmortems done, but among other reasons I feared that brother physicians would sneak around and criticise. Let us all recognize the good of postmortem examinations and do all we can to promote them.

I thank Dr. Lynch for his excellent paper.

Dr. Kenneth M. Lynch, Director, Pathological Department, Medical College of South Carolina, Charleston: (Closing the discussion): I of course, have no idea that we should in any way attempt any premature promotion of legislation. We are not ready for any legislation. We ourselves are not ready. We have to decide, ourselves, that postmortems are good things to be done; we have to decide that a postmortem is a good thing to be done on my body, on the bodies of my family. As an illustration I want to hold up the example of the faculty of the University of Pennsylvania, who have a club. Each member of that club promises to have an autopsy on his own body.

Autopsies can be gotten. The program is this: First convince ourselves of the fact that autopsies need to be done and can be done; then educate the general public, so that in the future, when they are ready for it, legislation will come. The legislation will come some day, but there has to be preparation for it.

INFECTIONS OF THE MAXILLARY SINUSES*

M. R. Mobley, M. D., Florence, S. C.

The maxillary sinus, roughly, is pyramidal in shape, being bounded above by the orbital plate of the superior maxilla, anteriorly by the canine fossa and posteriorly by the pterygomaxillary fossa. The base is formed by the lateral nasal wall. The normal capacity varies from 10 to 18 CC. The most important wall is the nasal, for it is through this wall at its thinnest portion, beneath the inferior turbinate bone, that most of the intra nasal operative measures for the relief of diseased conditions are directed. This wall also contains the normal opening of the antrum at its upper anterior portion, emptying into the middle nasal meatus beneath the middle turbinate bone. Catheterization of the antrum through this opening presents so many physical difficulties that it is not generally attempted. The mucous lining of the cavity is simply a prolongation of the mucous membrane of the nose. Years ago the alveolar boundary was looked upon as being of greatest importance because of the relationship of the roots of carious

teeth to the floor of the antrum. The second premolar and the first molar teeth are in closest proximity to the floor. In some instances the roots of teeth project into the cavity, being covered with only a thin film of bone. This explains irritation of the dental nerves with consequent pain in some infections of the antrum, and in some cases where there is pain on lavage in which an infection may or may not be present. The percentage of infections of the antrum of dental origin is variously estimated at from 20 to 30 per cent. In 338 cases of antrum infections operated on by us in the past six and a half years, 61, or slightly less than 20%, were of dental origin.

The antrum is more often diseased than its fellow sinuses, the relationship of the floor of the cavity to roots of carious teeth and lack of dependent drainage of the sinus being contributory factors in this increased incidence. The most frequent cause of disease is extension from the nasal mucous membrane. In every case of acute inflammation of the nasal mucosa the antral mucosa, as well as that of all of the other sinuses, is involved in the same process. In the case of the antrum, drainage is not dependent, and is still further impeded by swelling of the ostium, together with pressure on the opening by a swollen middle turbinate bone; resulting in poor ventilation as well as poor drainage, preventing resolution of the sinus mucosa, and thus producing a fertile soil for infection. The most common cause of antrum infection is the untreated cold, with its prolonged nasal obstruction, resulting in conditions ideal for the development of sinus infection. In order to prevent sinus infection we must preserve the proper ventilation and drainage of the nose. Realizing this, our treatment should be largely prophylactic. We have often seen cases of acute rhinitis, with marked nasal obstruction and with the development of a sinus infection apparently imminent, respond most favorably following one thorough shrinkage of the nasal mucous membrane with a 4% solution of cocaine. Infections of dental origin frequently go unrecognized for years, resulting in a marked degree of degeneration of the mucous membrane of the sinus. The majority of these old, longstanding cases require the radical operation

^{*}Read before the South Carolina Medical Association, Columbia, S. C., April 18, 1928.

for a cure. In these cases of dental origin the patient frequently complains of the onset of a fetid, purulent discharge from one nares, accompanied by nasal obstruction, but without any history of preceding cold. The discharge may precede or follow the extraction of a carious tooth. In extracting teeth the floor of the antrum is frequently removed in part. Where there is no apical abscess present this does not usually result in infection of the antrum. Occasionally, in an effort to extract a broken root the root is pushed through the floor of the antrum, becoming free in the cavity. We recently operated on such a case, in which a very acute infection of the antrum followed such an accident. Infection of the antrum from the overlying sinuses, frontal and ethmoid, occurs fairly frequently. This is usually brought about by the presence of a broad, uncinate process forming somewhat of a trough running from the duct of the frontal sinus to the opening of the antrum; the antrum in such cases acting as a reservoir. Frequently, in these cases, the mucosa of the sinus shows a marked tolerance to the presence of infectious discharges.

There is only one definite method of determing whether or not an antrum is infected, and that is by exploratory needle puncture. If pus is obtained on lavage, one is certain that the antrum contained purulent discharge. Whether the pus resulted from infection of the sinus, or whether the sinus was simply acting as a reservoir, is to be determined by examination of the other sinuses.

All carious or suspicious looking teeth should be x-rayed, and extracted if found to be abscessed. In such cases our policy is to thoroughly curette the socket of the diseased tooth and then allow healing to take place; continuing the treatment of the infected sinus by needle puncture under the inferior turbinate bone. The old Cooper method of extracting a diseased tooth, or in some cases a perfectly normal tooth, boring a hole through the alveolus and treating the antrum by this route, has been abandoned.

Transillumination is a valuable adjunct in the diagnosis of antrum infections. In our series, transillumination was positive in 312 cases out of a total of 338 cases treated, show-

ing that this test is positive fairly constantly. Certain abnormalities of the nose will cause transillumination to be unequal on both sides. It has been our experience, in routine examinations of the nose in uninfected cases, that the antrum on the side toward which there is a deviation of the septum will frequently show a haziness on transillumination. X-ray is also a valuable adjunct in the diagnosis, showing a blurring of the contour of the margins of the sinus as well as a shadow in case of a diseased sinus. However, the X-ray of an antrum is frequently the history of that cavity since birth. One may have had an antrum infection followed by complete recovery, and vet, due to fibrous tissue changes within the mucous membrane of the antrum, X-ray of this cavity for years afterwards will show a haziness of outline. X-ray of practically all old chronic cases on which a Caldwell-Luc operation has produced a cure will show a blurring of outline and some degree of haziness of the cavity.

The simplest diagnostic procedure in suspected cases of antrum infection is the needle puncture, using a lumbar puncture needle and going through the nasal wall at its thinnest portion beneath the middle turbinate bone. We feel that the use of large, curved trochars is absolutely unnecessary trauma to the patient, for, regardless of the size of the opening made with the ordinary cannula, drainage does not take place upon the removal of the cannula. due to the elesticity of the mucous membranes of the nose and antrum. Needle puncture gives you exact information as to the contents of the sinus; it is painless, and almost harmless, providing you are careful in your technique. A rhinologist who will diagnose and operate on a supposedly acute or chronic infection of the antrum simply upon X-ray findings or transillumination, separately or together, is guilty of gross carelessness. It is so easy to puncture with a needle and get exact information, and frequently our patients are spared large fees for treatment, or operations which are not necessary. I would that all the other sinuses were as accessible for diagnosis and treatment as the antrum.

Last, but by no means least, we have the direct naso-pharyngoscope to aid us in our

diagnosis. Unfortunately, this instrument of precision is not in common use among the majority or rhinologists. We must admit our shortcomings and state that it is only in the past six years that we have used it routinely in all head examinations. We are deeply chargrined when we think of cases seen prior to this time in which we were most positive in our opinion of the non-existence of sinus infection. Looking in at the front door of the nose, even after thorough shrinkage, we saw no evidence of disease; completely disregarding what was going on at the back door of the nose, and in some cases of chronic sinus infection it is only here that you can detect evidence of trouble. A satisfactory posterior rhinoscopy with a mirror, in the average patient, presents so many difficulties on account of the pharyngeal reflexes as to make it impractical.

In the acute cases of antrum infection there may be a feeling of distension and pressure, especially where there is a marked hyperaemia of the nasal mucosa, with a resulting complete obstruction of the nares. Pain is usually present in the acute cases, and is more intense the more complete the obstruction. The pain is not always confined to the area of the antrum. but is frequently supra-orbital. In acute infections of the sinuses we frequently have the frontals and anterior ethmoids involved along with the antra. We recall a case in which there was an acute infection of the anterior group of sinuses. The pain was entirely supraorbital. Our treatment was directed almost exclusively to promoting drainage from the frontal sinus. The pain persisted, and another rhinologist washed out the antrum and relieved the patient. Some patients complain of toothache, or of the teeth being on edge, or of being longer than those of the opposite side. The discharge is usually purulent when the patient reaches a rhinologist. In cases of dental origin, it is usually fetid, and may contain caseous masses. The classical position of the discharge is in the middle nasal meatus, beneath the middle turbinate bone. In very acute cases the entire nares may be filled with pus. In the more subacute cases only a small stream may be seen pouring over the posterior tip of the inferior turbinate bone into the nasopharynx. The nares on the affected side is

usually completely occluded. If the condition is bilateral the sense of smell may be lost, due to the oclusion, preventing the air from reaching the olfactory nerve filaments. In chronic cases, especially of dental origin, the patient may complain of a very foul odor. General symptoms, as fever, etc., depend upon the severity of the infection. The patient may complain of sore throat, due to the irritation of the pharynx by the discharge. In the more chronic unilateral cases a granular lateral pharyngitis may develop as a result of the irritation from the discharge.

As a rule, by the time a patient, presenting symptoms of antrum infection, consults a rhinologist, there is definite obstruction to drainage, and surgical measures are indicated. Conservative needle puncture will cure the great majority of these acute cases resulting from extension of the infection from the nasal mucosa. We usually use one to two quarts of warm boric acid solution for lavage, following this with the instillation of two to three CC of a 2% solution of mercurochrome into the cavity. We combine with this treatment an astringent nasal spray to promote ventilation and drainage. The most satisfactory one in our hands is a combination of the alkaloid of cocaine and Parke Davis' Chloretone Inhalant, used in a nebulizer, an excellent one being Parke Davis' Glaseptic Nebulizer. A better preparation, in our opinion, would be Cocaine Hydrochloride in equal parts of Alkaline Antiseptic solution and water; but it is not safe to prescribe this because of the varying amount the patient may absorb, and the fact that it may be abused. We have used the alkaloid, which is soluable in an oily medium, in thousands of cases with no untoward results.

In some of the more resistant types of infection, but particularly where it is not of dental origin, the cutting of a window in the naso-antral wall, beneath the inferior turbinate bone, will suffice to clear up the infection. The performance of this operation is greatly facilitated by fracturing the inferior turbinate bone upwards, in order that the operative field may be under direct visual observation. The antrum may be irrigated one or more times through this window, and the nasopharyngo-scope can be introduced into the cavity to de-

termine the degree of pathology of the mucosa. We do not always resort to this window operation, especially in old, long standing cases and in most cases where the infection is dental in origin. In these latter cases the infection has frequently gone unrecognized so long that regeneration of the antral mucosa has been rendered impossible. In the past, we have been guilty of ultra-conservatism in the treatment of chronic infections of the antrum. We have persisted in needle puncture, and when our patient has finally come to the radical operation we have realized, on seeing the marked degenerative condition of the antral mucosa, how futile our effort has been. Drainage through a window, in our opinion, will not suffice in these cases. The antral mucosa is diseased beyond its regenerative powers, the entire cavity frequently being filled with a mass of polypoid tissue, and, unless it is thoroughly removed, it will continue to act as a focus of infection. Here the 'Caldwell-luc, or radical operation, yields excellent results. The antral mucosa should be thoroughly curetted, and a large window made in the naso-antral wall beneath the inferior turbinate bone, extending down to and along the floor of the nose. The technique and ease of performing this operation is greatly facilitated by the use of a local anesthetic.

DISCUSSION

Dr. W. J. Bristow, 1512 Marion St., Columbia: Dr. Mobley's paper upon infections of the mixillary sinues is most complete and comprehensive, and his opinions are evidently the result of the observation and treatment of a large number of cases. I am fully in accord with the ideas he

has expressed except the ones relating to the treatment of these conditions. My own treatment is as follows: If the x-ray shows an abscess on the ends of the roots of any teeth in the floor of the antrum, the teeth should be extracted and the cavity curetted. If necrosis extends into the antrum, the antrum edges around the tooth cavity should be curetted and the cavity allowed to close. In the after treatment the secretions should be washed out of the cavity by way of the nose. It should always be remembered that an infected antrum from an abscessed tooth may at the same time be acting as a reservoir for diseased ethmoid cells or a frontal sinus.

The simplest and easiest method of treating antral diseases, and the method by which is obtained the highest percentage of cures, is puncture and lavage. When properly done this procedure is not an ordeal for the patient, and both ventilation and drainage of the antrum are accomplished with the least possible traumatism. When the secretion has become thin and watery, puncture and lavage may be replaced by suction.

If an antrum is not cured in a month or six weeks by washing through the antrum trocar, an operation to secure more permanent drainage is indicated. A semiradical antrum operation is performed by making a large opening under the inferior turbinate through the antronasal wall. This opening can be made large enough for palpation of the antral walls with a curet, and for direct inspection with a nasopharyngoscope. In cases of extreme necrosis, with granulations, polypi, or new growths, the intranasal operation alone is not sufficient and must be combined with the external radical operation.

There is just one other point which I want to bring out, since hearing Dr. Mobley's paper, and that is the use of the nasopharyngoscope in the diagnosis of maxillary sinusitis. I believe more accurate information can be obtained with the nasopharyngoscope than by the use of any other procedure in diagnosis.

(No further discussion.)

MARYLAND PLANS RELIEF FOR CRIPPLED CHILDREN

Several Maryland counties have organized clinics for the examination of crippled children during the summer and an effort is being made to give them the benefit of skilled medical and surgical care either in local or in Baltimore hospitals. Surveys are under way in a number of places to find out the number of crippled children of school age, in order that provision may be made for their school

attendance. The Maryland League for Crippled Children has estimated that Maryland has 4,500 crippled boys and girls under 21, and that 2,000 of them live outside the city of Baltimore. A study made in Baltimore indicated that half the crippled children became disabled through infantile paralysis, and 16 per cent through tuberculosis; only about 6 per cent had been crippled from birth, and relief of some sort was possible for all but about 2 per cent.

U. S. Children's Bureau.

OBSTETRICS AND GYNECOLOGY

R. E. SEIBELS, M. D., COLUMBIA, S. C.

NOTES ON BREECH DELIVERIES

There has been a marked change in recent years in the attitude of obstetricians toward the method of handling breech cases, and since the technic has been altered physicians in general approach breech deliveries in primiparae with less anxiety; and some even recommend doing a version and breech in a primipara with an occiput posterior, rather than to use forceps.

A gentle dilatation of the lower birth canal is routinely practiced by some obstetricians before any sort of operative delivery is begun. This is particularly helpful in the breech cases and almost a necessity in versions. Under an anesthetic the posterior vaginal wall and the outlet are gently ironed out, using two fingers, three, four, until by gently stretching the levator muscles in all directions the fist can be easily passed in and out of the vulva.

The first change in the method of handling such cases came with the realization that there is no occasion for hurry in delivery after the appearance of the naval at the vulva. Ten years ago, five minutes was the alotted time in which the rest of the delivery was supposed to be accomplished for fear of fetal asphyxia: but, it was discovered that the baby became asphyxiated not from pressure on the cord but from drowning, due to the efforts at respiration which followed the pulling on the legs and pelvis, which thereby depressed the diaphram and sucked fluid in. Nowadays, no time limit is set on the completion of the delivery and it is not infrequent to have a baby remain from thirty to forty minutes in the birth canal after the naval appears. The cord should be brought down for about one inch after the birth of the naval and the next step in delivery should be carried out by the contractions of the uterus. If the patient has been anesthetized up to this point, the anesthetic should be stopped and the uterus very gently massaged to induce contractions. It is obvious that pituitary extract should not be used at this stage.

With the return of uterine contraction the obstetrician should gently lift the baby and move it from side to side to assist in the expulsion of the scapulae. When the anterior shoulder appears the finger should be gently passed along the humerus and "the baby's face wiped with its forearm and hand." Care must be used, if the arm is alongside the head or the elbow has dropped back of the ociput, not to put too much pressure on the humerus as this is easly fractured. The other arm should be delivered as an anterior position, turning the baby in the opposite direction from the arm to be delivered—that is, if the left arm remains to be delivered the occiput should be turned to the obstetrician's right.

The next great fear in breech deliveries was Erb's palsy, which was due to pressure on the brachial plexus from the fingers which were hooked over the shoulders in pulling downward. This is no longer considered permissable in a live baby. The head should be turned so that the occiput lies in either the right or left anterior position, and then with gentle pressure with the obstetrician's other hand uterine contractions should be aided in flexing the head, as until the head is well flexed it does not readily enter the true pelvis. The pressure of the hand is continued during contractions and relaxed when the uterus relaxes, and it will be found that the after-coming head will be born by the same mechanism as in a simple primary occiput anterior. The baby's body should be maintained in the longitudinal position and not thrown up on the mother's abdomen as was formerly taught. In many cases, "asphyxia neonatorum" was due to fracture of the first or second cervical vertebra from hyperextension of the neck through this manouvre.

As soon as the baby's chin reaches the perineum a Sims' retractor—or the handle of a bent pewter spoon—should be used to pull the perineum down and with a piece of gauze or cotton the baby's mouth should be wiped out and kept free of mucus and blood. At the

same time a gentle massage of the trachea towards the mouth will affect a discharge of considerable fluid. It is not infrequent that the baby's mouth is visible and the baby breathing many minutes before the brow is delivered.

The remainder of the delivery should be unhurried and in primiparae plenty of time should be allowed for the perineum to be stretched. After delivery the baby should be handled with the greatest care and gentleness, and if it is cyanotic nothing should be done to stimulate respiration except to hold it up by the heels and continue the gentle stroking of the trachea to remove inspired fluid. Carbon dioxide in the baby's blood is the best stimulant for respiration that has ever been devised.

If the baby is pallid, fracture of the cervical vertebrae, cerebral hemorrhage or some other trauma during delivery should be suspected, and if this is present there is all the more reason for handling the baby as little as possible. It should be warmly wrapped, artificial heat applied and no violent effort made at stimulating it.

Following a breech, as in all deliveries, the cervix should be carefully inspected for laceration for the unmoulded head will not infrequently cause an extensive laceration, which is a frequent origin of post partum hemorrhage. If laceration of the cervix is present it should be promptly repaired.

PHILADELPHIA FIGHTS DIPHTHERIA

Display by the moving-picture theaters of a proclamation by the mayor of Philadelphia urging parents to have their children immunized against diphtheria was part of the campaign against this disease which was undertaken by the health agencies and other organizations of Philadelphia. The department of public health sponsored the campaign, and members of the staff did the inoculating, using 70 public and 8 parochial schools as centers for the work. Public-utility and life-insurance companies aided in the work of distributing posters and circulars explaining the purpose of the drive.

U. S. Children's Bureau.

PROGRESS IN PARENTAL EDUCATION

A National Council of Parental Education was recently formed in New York City to fur-

ther development in this field of study. The membership consists of organizations interested in parent education.

U. S. Children's Bureau.

MEDICAL SERVICE FOR RURAL CHILDREN IN GEORGIA

Twenty-five hospitals and a dozen railroads in Georgia have responded to an appeal of the State health commissioner by promising reduced rates to rural school children in need of medical care, so that they may have the same expert medical service as is available to children in the larger cities of the state. No district in the state is over 75 miles from a hospital.

U. S. Children's Bureau.

SOCIETY REPORTS

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, JUNE 26, 1928, AT 8:30 O'CLOCK.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Doctors B. R. Baker, M. W. Beach, J. W. Burn, T. H. Burnes, F. G. Cain, H. W. De Saussure, O. B. Chamberlain, H. P. Jackson, C. W. Kollock, K. M. Lynch, R. L. McCrady, W. C. O'Driscoll, H. H. Plowden, R. H. Price, W. R. Rhett, E. Rutledge, T. M. Scharlock, W. A. Smith, R. B. Taft, J. R. Townsend, J. I. Waring, I. R. Wilson, W. R. Prioleau. (23).

Guests: Major D. R. Chase, U. S. A.; Majors Godfrey, Vincent and Lieutenant Mole, M. R. C., and Dr. R. H. Lanning, U. S. N.

The minutes of the meeting of June 12 were read and confirmed.

The President reported that he had clipped the coupons from the Alston bequest amounting to \$292.17 and submitted the following receipt for the same which he transmitted for the Board of Finance.

Received from H. P. Jackson, M. D., President of the Medical Society, of South Carolina coupons clipped from Bonds of the Alston Bequest amounting to Two Hundred and Ninety-two and 17/100 Dollars as follows:

1	4th	Liberty	\$ 50.00	\$ 1.06
2	3rd	Liberty	 200.00	4.24
1	4th	Liberty	 500.00	10.62
8	4th	Liberty	 8000.00	170.00
1	\$ _		 5000.00	106.25

\$292.17

G. McF. Mood, M. D., Treas., Board of Finance,

Medical Society of South Carolina.

June 20, 1928.

Dr. C. W. Kollock, Chairman of the Censors reported that the Board had not the _____? its meeting and was not able to report on the investigation of Dr. F. L. Echols.

The Scientific session was called at 9 P. M. "Case Reports and Exhibition of Specimens."

Dr. R. L. McCrady reported a case of premature separation of the placenta which had come into the hospital in a morinund condition. He discussed the symptoms of the condition and exhibited a specimen of the uterus which had been removed at autopsy. He stated that he had opened the uterus in this case in the hopes of saving the child.

Dr. C. W. Kollock reported a case of rupture of the lens and stated that this condition is very rare. In his forty years of practice he had never seen a case like it before.

A case report from the Pediatric Department was made by Dr. M. W. Beach. Diagnosis in this case had been encyphlitis following whooping cough. Dr. Beach outlined the symptoms and asked for discussion before giving the autopsy findings. Dr. W. M. Rhett, O. B. Chamberlain discussed the case. Dr. Beach then had Dr. Lynch present the autopsy findings which proved to be a case of Little's disease.

Dr. Whythe M. Rhett reported a case of colitis complicated by infection of the middle ear. Discussed by Dr. Beach, Townsend, Lynch, and Price, Dr. Rhett closing.

Dr. J. I. Waring reported a case of achrodinia in a child with apparent recovery. Dr. Waring exhibited serial photographs and outlined a treatment used.

The paper of the evening was read by Dr. J. I. Waring on "Syphilis in Infancy." This was discussed by Dr. Cain, Taft, Lynch. Dr. Waring closing.

There being no further business the meeting adjourned.

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SO-CIETY, HELD IN THE DIRECTORS' ROOM OF THE CHAMBER OF COMMERCE, MON-DAY, JULY 2, 1928.

The meeting was called to order by the President, Dr. Johnston at 8:20 P. M. with about forty members and guests present.

Reports of clinical cases were then called for. Dr. Davis reported a case of one kidney in a woman patient who had previously had a bicornuate uterus removed.

Dr. Grimball commented on the numbers of cases of fever of undetermined cause which he had recently observed, stating that the outstanding symptoms were addominal pain, pains in back and legs and low white blood cell (count).

The paper of the evening was then presented by Dr. B. S. Allen of the Dental Society, the subject of which was "The Common Problem of the Physician and the Dentist." In referring patients to the dentist the physician should communicate directly with the dentist giving the symptoms and an accurate history of the patient's illness. It is a mistake to make the patient a messenger from doctor to dentist as the facts are often misconstrued in the lay mind and all sorts of trouble follows. Dr. Allen then mentioned that devitalized teeth are always to be regarded as a source of trouble and should be constantly looked upon with suspicion.

Next, our essayist dealt with the subject of pyorrhea stating that it was almost always a bug-bear with both the doctor and the dentist. However, with faithful and conscientious treatment the condition is often relieved.

In closing, Dr. Allen gave a plea for more sympathy and understanding between physician and dentist that their patients might benefit from their skill to the utmost. Dr. Brown moved that Dr. Allen's paper be discussed with the next one of the evening.

The President then called upon Dr. J. L. Anderson who presented a very interesting paper on "Foci of Infection in the Mouth and Their Relation to Gastro-Intestinal Diseases." Dr. Anderson called attention to the fact that this is one of the most common problems for the physician and dentist to decide. He further stated that the hydrochloric acid of the gastric juice might destroy many of the pathogenic organisms in the mouth and thus save an intestinal infection, but if there is an inadequacy of gastric acid and the resistance is low infection of the gastro-intestinal is likely to occur. Dr. Anderson then gave a resume of Rosenow's work on foci of infection, and mentioned that these gastro-intestinal diseases tend to persist as long as the source of infection in the mouth persists. In conclusion the essayist stated that it was very necessary for both professions to depend upon one another. Both papers were discussed by Drs. J. R. Simmons (Dental), W. T. Brockman, C. O. Bates, Fergusson (Dental), Pollitzer, Murray, Grimball, Sparks (Dental), Brown, and Kluttz; closed by Drs. Allen and Anderson.

The application for membership of Dr. Bell was then submitted. Dr. Davis moved that Dr. Bell be elected a member of the Society; seconded and unanimously carried.

Dr. Davis then discussed the valuable service which was being rendered by the Physicians' and Nurses' Exchange.

Dr. Sanders moved that a banquet be held on July 30th in honour of the Southern Paediatric Seminar of Saluda, N. C.; seconded and carried.

There being no further business the motion to adjourn was in order.

Irving S. Barksdale, M. D., Sec.

MINUTES OF THE BANQUET HELD IN HONOR OF THE SOUTHERN PAEDIATRIC SEMINAR OF SALUDA, N. C., MONDAY, JULY 30TH AT THE POINSETT HOTEL CLUB DINING ROOM.

The President, Dr. Johnston called upon Dr. Carpenter who said grace.

There were 70 members and guests present at this very pleasing and well served banquet.

After the banquet President Johnston requested Dr. Lesesne Smith to introduce the members of his party.

After the introduction Dr. Phillip Barbour of Louisville, Ky., gave a brief but informing talk on "The Significance of the Leukocyte Count." He stated that the leukocyte count was one of the most important studies in establishing a diagnosis, and further added that it was a valuable means of saving patients from unnecessary operations. Small lymphocytes predominate in children, rather than the polynuclears. An increase of small lymphocytes over 50% means infection in a child. The leukocytes begin to predominate and simulate the adult blood count after five years of age. This is to be borne in mind if mistakes in diagnosis are to be avoided. A leukocyte count of over 25,000 signifies a severe infection; and increase in the number of polynuclears denotes a greater resistance on the part of the patient. Owing to the leukocytosis following a meal, we should wait 3-4 hours after a meal before taking a specimen of the blood. Dr. Barbour then stated that the white count was of great value in the diagnosis of appendicitis when the count does not mount up very high. In severe mastoid disease high counts are found, also in the pneumonias and peritonitis. The white count incident to pyelitis is not very high unless the pus is under pressure due to blocking of the ureter; unstoppage of an ureter causes the white count to drop decidely.

The next speaker was Dr. Richardson of Black Mountain, N. C., who made some interesting remarks on posture. Dr. Richardson stressed the fact that posture exercises are not carried out properly because they are not made interesting enough.

The next speaker was Dr. Francis B. Johnson, of Charleston, who discussed briefly the importance of Spinal Fluid Examinations. Dr. Johnson made a plea for more frequent spinal fluid examinations stating that much depended upon the position of the patient who should be on a flat surface with hips and shoulders held at right angles to the bed. An important thing to remember is that a cloudy spinal fluid does not always mean an infection—instead this fluid should be studied more closely and the organisms, if any, duly and properly identified.

Dr. Smith then discussed briefly some com-

mon complications of diarrhoea as observed in his clinic for the past two years. He stated that stomatitis is very common, and when noticed smears are made and stained for Vincent's organisms. If these are present 2% neoarsphroamine in glycerine has been found to be of value; blood transfusion also yields good results in the treatment. Dr. Smith then called attention to the tetany that becomes manifest after severe diarrhoeas. Exposure for 1-5 minutes under the Alpine Lamp has proven to be of value. In discussing Dr. Smith's treatment of Vincent's angina, Dr. Barbour said that he had achieved excellent results by administering neoarsphenamine or salvarsan in the form of enemas.

The President then called for reports of clinical cases; no reports were made.

There being no further business, the meeting adjourned.

Irving S. Barksdale, M. D., Secretary.

OCONEE

The Oconee County Medical Society met at Westminster, August 15th, Dr. J. W. Bell, Walhalla, president in the chair. The following members were present: Drs. W. C. Marett, F. T. Simpson, W. A. Strickland, B. F. Sloan, J. W. Bell, L. H. Jennings, E. A. Hines. A report of the steering committee appointed to submit a plan for the building of a County Hospital was received and approved. The subject for special discussion was Pellagra. All of the physicians present reported an increase in the number of cases and called attention to the tendency of such patients to wander from one doctor to another and thus an error in statistics often occurred. Dr. W. A. Strickland reported an interesting clinical case for diagnosis. One new member, Dr. Edgar A. Hines, Jr., of Seneca, who is now an intern in St. Elizabeth's Hospital in Richmond, was received into the Society. Arrangements were made to entertain the Fourth District Medical Society in Seneca early in October, the following committee being appointed to have charge of the details: Dr. E. A. Hines, Chairman, Dr. W. C. Marett, Dr. J. S. Stribling. It is expected that there will be about one hundred physicians in attendance representing seven counties.

E. A. Hines, Secretary.

DISTRICT MEETING AT AIKEN, S. C.

The Second District Medical Association (Aiken, Edgefield, Lexington, Richland, and Saluda Counties) met at Aiken, S. C., July 17, 1928, for its summer meeting.

The meeting was held at the Hotel Aiken where a delicious supper was served. Much credit to the success of the meeting was due to

Dr. S. D. Boone of Aiken who cared for arranging the place of meeting, etc.

At six P. M. Dr. O. P. Wise of Saluda, Vice-President, called the meeting to order. After the roll call and payment of dues the minutes of the Batesburg, S. C., meeting were read and approved.

Dr. A. T. Moore of Columbia reported some interesting cases of Sciatica. Dr. S. E. Harmon of Columbia discussed Ruptured Duodenal Ulcer and stressed the classical symptoms, the diagnosis, and the treatment. Dr. S. D. Boone read an interesting paper on "A Few Problems Encountered in Industrial Practice." Facts of the importance of thorough physical examinations were emphasized in this paper. Dr. B. F. Wyman of the State Board of Health related what is being done for the mid-wives of the state and how thorough they were being trained. "They are taught what to do and what not to do." A general discussion followed which was closed by Dr. Hayne. The speaker of the evening was Dr. W. R. Houston of the Department of Medicine, Augusta, Ga. Dr. Houston gave an interesting as well as instructive address on "The Pathogenic Right Colon," also known as floating kidney. He reported several cases of interest and gave remarks on the importance of keeping this trouble in mind.

Under new business the following officers were elected to serve until July, 1929: O. P. Wise, M. D., President; S. D. Boone, M. D., Vice-President; T. D. Dotterer, M. D., Secretary-Treasurer.

Batesburg was chosen as the next place of meeting.

CHESTERFIELD COUNTY MEDICAL SOCIETY

We held our regular monthly meeting at the home of Dr. R. L. Gardner, Chesterfield, on August 14th, at 8:00 P. M. At the "zero hour" Dr. Gardner ordered us "over the top" and we captured the dining room with little resistance from the enemy. "To the victor belongs the spoils," and we arrived just as Dr. Gardner had prepared one of his "Pine Bark Stews".... 'nuff sed.

After this feast our Commanding General (Dr. G. S. Gaskins) took personal charge and put us through the usual drill on Parliamentary Laws. The following doctors and visitors took part in extended order drill: R. L. Gardner, C. A. Bolt, C. H. Purvis, D. T. Teal, J. S. Gaskins, R. M. Newsome, D. C. Griggs, R. J. Coney, J. B. Nuse, and P. H. Hearn.

Symposium on Precordial Pain.

Essayist: Drs. R. L. Gardner and R. J. Coney. Every member present was called upon to express his views on this great scientific problem.

The following orders were then issued: You

are ordered to duty at the home of Dr. R. J. Coney, Cheraw, on September 11th at 8:00 P. M. Dr. D. C. Griggs and Dr. C. A. Bolt will furnish plans for this attack.

Signed: R. J. Coney, Adj. and Sec.

Cheraw, S. C., August 15, 1928.

YORK RESOLUTIONS

Again it becomes the sad duty of your committee on necrology to record the loss of another member of our society. On June 3, 1928, Dr. Jas. D. McDowell closed his eyes on earth, to open them on the light and the glory of the unending morning and the brightness and the beauty of the everlasting day.

For twenty years he had fought his fight with a disease that he knew was mortal, and yet he met it with the calm courage of a Christian, serene and unafraid.

Dr. McDowell was an especially valued member of the society because of his regularity in attendance, the clarity and definiteness of the knowledge which he brought to bear on subjects under discussion, the originality and value of the papers he presented and his unusual ability to untangle parliamentary snarls and to pour oil on the troubled waters of discussional disagreements. He enjoyed to an unusual degree the confidence of a wide circle of friends in this and other counties, and calls upon him for consultation were frequent from all parts of this and adjacent counties. In all that is implied in the highest sense of the term a "gentleman" he filled the measurer full. His cheery smile, his cordial hand clasp and his unfailing optimism even to the last hours of his life made him "persona gratis" to all with whom he came in contact. To the widow and the fatherless children who remain we extend our deepest sympathies, and our desire to be of assistance to them when medical services are needed and the assurance that

"He who stills the ravens clamorous nest

And decks the lily fair with flowery pride" will not be unmindful of the distress of his children and to him and to the word of his grace we commend them.

J. R. Miller, M. D., W. C. Whitesides, M. D., E. W. Pressley, M. D., Committee

NEWS ITEMS—VARIOUS SOCIETY MEETINGS

The Seventh District Medical Association will meet at Manning, under the Presidency of Dr G. L. Dickson, September 13. Secretary Epps has sent out a commanding call and notes that "the big, fat, Black River bream and red-breast," will have a prominent place on the program.

The Fourth District Medical Association will have their meeting at Seneca, October 2. The Oconee Society never fails to provide a hospitable occasion to the Mother of District Societies of the State. Dr. Thomas Brockman, the President, Dr. Rosa Gantt, the Secretary have combined their efforts toward making this a banner meeting even though it is in the corner of the District.

The Inter-State Post Graduate Assembly in Atlanta, October 12-14, as will be noted in the advertising columns, promises to be one of most notable gatherings of medical men ever held in the South with an attendance expected of 5,000. It will be of tremendous interest to the South Carolina doctors owing to the proximity of Atlanta.

The Southern Medical Association is so attractive to its more than seven thousand members that little boosting is really needed to call attenton to the meeting in Asheville, November 12th to the 16th. It matters little how many other Societies may be holding meetings or what attractions of a non-medical nature may be going on, 2,000 or more doctors always find themselves eliminating most all other dates that conflict with the Southern. South Carolina doctors are especially loyal in this regard.

Dr. William Egleston gave a fish-fry to the office force of the State Board of Health and to the members of the Executive Committee at Hartsville, August 10.

The Sim's Memorial Committee met in Columbia recently to pass on the designs for the Sim's Memorial which it is hoped to unveil the latter part of the year.

The many friends of Dr. and Mrs. H. M. Stuckey, of Sumter, will be glad to know that the doctor is improving after a very serious illness lasting several months.

MINUTES

MINUTES HOUSE OF DELEGATES, COLUM-BIA, APRIL 18, 1928

(Continued)

Dr. G. C. Bolin, Chairman of the Committee on Health and Public Instruction, read the report of that committee.

Dr. A. Earle Boozer, Secretary of the State Board of Medical Examiners, read the Board's report.

The report of the Delegates to the American Medical Association was read by Dr. J. H. Cannon, one of the delegates, and was discussed by Dr. J. W. Jervey, Greenville.

A motion by Dr. W. P. Timmerman, of Batesburg, to receive all the reports before considering any of them, was seconded and carried.

Dr. W. B. Lyles, Chairman of the Committee on the Study and Prevention of Venereal Diseases, read the report of his committee.

Dr. J. M. Beeler, Chairman, made report for the Committee on Standardization of Hospitals:

REPORT OF THE STATE BOARD OF MEDI-CAL EXAMINERS OF SOUTH CAROLINA . FOR THE YEAR 1927

Applicants for Examination

Doctors June Examination 35	
Doctors November Examination 3	
	38
Nurses June Examination 66	
Nurses November Examination 81	
	147
	185
Doctors	
White males 34	
Colored males 3	
White females 1	
Colored females0	
38	
Nurses	

The Board met in Columbia, S. C. in July and November, 1927, to tabulate the grades made by the applicants at the June and November examinations, with the following results:

147

185

Colored _____

		Doctors	
White	passed		35
Colored	passed		2
White f	ailed		0
Colored	failed .		1
			38
		Nurana	

	i ui ses			
	June	Nov.		
White passed	39	53	92	
Colored passed	5	7	12	
White failed	14	18	32	
Colored failed	8	3	11	
	66	81	147	185

Respectfully submitted, A. Earle Boozer, M. D., Secretary.

REPORT OF THE DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION, WASHINGTON, D. C., MAY 16-20, 1927

Mr. President and Gentlemen:

Your delegates to the 78th Annual Session of the American Medical Association in Washington, May 16-20, 1927, beg to submit the following report:

The House of Delegates convened in the Auditorium of the Medical Society of the District of Columbia and was called to order at 10 A. M., May 16th by the speaker, Dr. F. C. Warnshins of Michigan whose address called attention to the problem of nursing education and nursing service and explained how through a misunderstanding, there were two committees at work on this problem and emphasized that all studies, surveys and recommendations should emenate from the American Medical Association and not from any newly constituted independent organization.

He pointed out the potential danger resulting from incompetently trained men doing surgery and urged that proper action be taken to standardize the requirements, qualifications and standards that are basic and essential and to formulate means whereby the public may make such identification.

He called attention to private hospitals which were some times lacking in features of administration essential to proper care of patients as judged by present day standards and urged that the Bureau of Legal Medicine draft a bill to be recommended by State Associations to their State Legislatures in which a minimum standard of administrative and staff requirements be specified and supervisory inspection and control instituted.

The report of the Secretary, Dr. Olin West, contained some features of interest:

A new high mark of enrollment was reached, March. 1927, with the figure 93,882, being a new gain of 2,090 over the corresponding date a year previous. He again urged that County Societies make every effort to keep their enrollment intact and avoid dropping and re-enrolling of members stating that in the last year there were 6,000 such. This entails a great and quite unnecessary burden, financially and otherwise on the home office. The total number of Fellows as of March 1, 1927, was 60,958, an increase of 2,277 over the preceding year. Number of Fellows in South Caro-

lina 385 as against 357 in the previous year—a gain of 27. Number of Fellows in the state as compared with total membership only forty-eight per cent. Fellowship is taken as an indication of earnestness and support to Organized Medicine, and your delegates recommend that appropriate action be taken by this House in an effort to increase the number of Fellows in our State. The Secretary also pointed out that each year more and more State Associations are working out and adopting definite working programs and have been diligent in their efforts to carry out such programs. He emphasized the value of having specific and purposeful plans and of working toward the accomplishment of definite ends.

Your delegates feel that the wisdom of such a plan is apparent and recommends your serious consideration of this subject.

Dr. West stated that eleven state associations and 120 county societies have officially adopted the plan of medical relief in disaster. The Reference Committee on Legislation and Public Relations commentated very favorably on the efficiency of the Committee as demonstrated in the Mississippi disaster as proving the wisdom of correlating the work of the Red Cross, U. S. P. H. S., American Medical Association, State Health Departments and County Medical Societies acting as a unit and urged that all State and County Societies who have not done so to adopt the plan.

He cited the necessity for a Constitution for State and County Societies whose basic provisions of organic laws were uniform, that such a constitution had been prepared and up to that time had been adopted by two or three states with some modifications—was under consideration by others and still more had failed to give it consideration.

The Board of Trustees reported an increase in circulation of the Journal of the American Medical Association,—3730 during the year—90,312 now being the total figure.

The income from advertising in the Journal showed a handsome increase and the Spanish Edition continues to lead all Medical Journals printed in Spanish in spite of advertising campaigns of some competing European Journals and showed an increase of 257 over the previous year. Its publication was at a loss of \$14,399.13 and \$2,659.03 more than last year. The Rockefeller Foundation has generously continued to assume one-half the net cost.

The special Journals continue to hold high place among such publications and show gradual gains. Hygeia showed a gain of over 10,000—a gain in every state. Grateful acknowledgment is made to the Woman's Auxiliary for their efforts in increasing the circulation of perhaps the greatest aid to organized Medicine in its campaign in the prevention of disease through education of the public.

During the year, the Endex Medicus, published by the Carnegie Institution was combined with the Quarterly Cumulative Index, preserving the identity of the two under the name of "Quarterly Cumulative Index Medicus" and the value enhanced enormously by the inclusion of more journals and greater care in selection and classification of titles, cross indexing, etc.

As evidence of an effort to meet the responsibility incumbent on the profession to educate the public, there was distributed through the Bureau of Health and Public Instruction 242,892 pamphlets in 1927 on various subjects as—Cancer, Vision, Baby Welfare, Public Health, Communicable Diseases, etc. An increase of over 28,000 as compared with the preceding year. There has been added twenty-six more pamphlets of great value on similar subjects and may be had in any quantity at small cost.

This Bureau has established most cordial relations with the National Education Association and National Congress of Parent-Teacher Association resulting in an approach to teachers of Public Schools to great advantage and as evidence of its value to parents and children cite the campaign to secure physical examination of the pre-school child. Last year more than 50,000 such were examined, mostly by the family physician and many remediable defects were corrected. The Bureau furnished 10,000 copies of a height and

weight chart and this year is undertaking to supply 50,000 copies of the blanks used in recording such examinations. The sale of blanks for periodic health examination continues at the rate of about 1,500 a week and from information derived from various parts of the country, believe interest in this phase of preventative medicine is increasing but feel that every county society should be urged to continue to have discussions and demonstrations on the subject.

It is not generally appreciated, the scope and value of the work done by the Council of Pharmacy and Chemistry for the physician and the public. I quote from their report: "For twenty-two years, the work of the Council has been carried on by a body of trained men who have labored untiringly and without remuneration for the cause of scientific medicine. Within this period and as a direct result of the effort of the council and of the support they have received, there has taken place a revolution in Therapeutics such as was thought impossible a quarter of a century ago. But much remains to be done and the work of the council deserves even wider recognition and acceptance. It will receive this when physicians generally come to realize and appreciate the convenience and advantage of having the services of a thoroughly experienced body of specialists adequately equipped to judge the claims of the thousand and one preparations which members of the profession are daily importuned to use, but which as individuals cannot possibly find time to examine with proper critical attention. Every physician should support the council by confining his use of proprietary drugs to those found acceptable for inclusion in "New and Non-official Remedies."

They advise Editors and Medical Journals to insist upon a preliminary council report before accepting papers on new drugs, thereby protecting the profession against drugs introduced on insufficient evidence by over enthusiastic observers.

It is not generally appreciated that in the book, useful drugs edited by R. A. Hatcher and Carey Eggleston and sold at a comparatively small price, one may obtain a Materia Medica conforming to the tenth edition of the Pharmacopia with actions and uses of drugs to conform to the latest and best results of therapeutic and pharmacologic research. This with the Epitome of the USP and Epitome of National Formulary and New and Non-official Remedies gives the physician in small compass and minimum cost most of the reliable drugs and procedures.

Thirteen requests were made and eleven grants made by the Committee on "Thorapeutic Research" and there were sixteen papers published under grants of this committee, many being of definite importance.

Regarding the amount of alcohol which may be prescribed by physicians, the House of Delegates went on record as opposing the principle that Lay Legislative bodies should not enact restrictive laws regulating the utilization of any therapeutic agent by legally qualified practitioners of medicine. They also adopted the report of the judicial council recommending that "every resolution relating to the alcohol question should be referred to the Board of Trustees for investigation." The Board of Trustees were requested to again investigate Heroin and have the Council of Pharmacy and Chemistry make another investigation of its use in conjunction with Scientific Sections.

The Bureau of Legal Medicine is cooperating with the Committee of the National Conference of Commissioners on uniform state laws in an effort to prepare a model state narcotic law satisfactory to the medical and legal professions and to that end are making a study of state narcotic laws and methods of enforcing them.

The Council of Physical Therapy is continuing its work and reporting its progress from time to time in the Journal.

The Package Library Service is growing in popularity and extent. It is not generally known that literature may he borrowed from the library on various subjects for a limited time by members of the Association thereby making accessible to every member literature which he may need and to which he has not access.

The work entailed in an effort to investigate the nurses training and education is going forward satisfactorily and as evidence of their efforts 197,000 questionnaires have been distributed. Cooperation with the American Nursing Association, American Hospital Association, American College of Surgeons, American Public Health Association, National League of Nursing Education and National Organization for Public Health Nursing has been effected. A most exhaustive investigation of the problem is under way, and the American Medical Association has contributed \$5,000.00 to further the investigation.

In compliance with the resolution passed by the House of Delegates at the Dallas Session a member of the staff of the Bureau of Legal Medicine and Legislation was assigned to full time duty in Washington during the sessions of Congress.

The question of contract practice which was referred to the judicial council for definition, reported that the interpretation of the ethics will depend upon the merits or demerits of the individual case, such points as inadequate compensation as compared to the usual fees paid for the same kind of service and class of people in the same community as to make it impossible for competent service to be rendered, or underbidding by physicians to secure the contract, or the denial of reasonable free choice of physicians, or solicitation of patients directly or indirectly, will be considered unethical.

New business was introduced as follows: Dr. A. E. Bulson of Indiana offered a resolution making it unethical for any member of the American Medical Association to willingly permit his name to be connected with any medical or surgical article or interview that appears in the Lay Press that may be possibly construed as an act of self exploitation but should appear under the auspices of this association, or one of its constituent associations or component societies which was adopted.

Dr. A. E. Hines, South Carolina, introduced a resolution providing for the deduction from the income tax, expenses incurred by a tax-payer for himself or his family for medical treatment, surgical operation, hospital and funeral expenses, nurse hire, drugs, etc. On motion of the Reference Committee it was referred to the Board of Trustees to be transmitted to the Constituent State Associations for action.

A resolution was introduced by Dr. Orin Wightman, New York, at the request of the Department of Legal Medicine of the New York Department of Public Health regarding Cosmetics containing potentially harmful ingredients without the label stating the harmful content and urging that laws be enacted by Congress to obviate such danger, and that uniform state laws should be enacted by the several state legislative bodies, which was also adopted.

The Committee charged to investigate on indigent physicians, Dr. Gco. Simmons, chairman, reported that the need for a national home for incapacitated and indigent physicians is not sufficient to warrant the American Medical Association establishing, managing and maintaining such a home.

Foreign delegates were present representing, Great

Britain, Canada, Mexico, Cuba, Panama, Colombia and perhaps other countries.

Other features of the meeting included an address by the President of the United States and also a reception given by the President and Mrs. Coolidge on the White House lawn for the physicians attending the meeting.

The newspaper publicity given this session was the greatest ever accorded an Annual Meeting and seemed to be taken as an indication of increasing interest of the public in the progress of Medicine and of cooperation between the American Medical Association and the American Press.

Entertainment for those attending the meeting was extensive and elaborate, consisting of luncheons, drives to points of interest, receptions, etc.

The Scientific Sessions presented approximately 300 papers of unusually high calibre and there were Diagnostic Clinics provided at the various hospitals by men prominent in their line.

Your delegates attended each session of the meeting of the House of Delegates. Your junior delegate was selected as a member of the Reference Committee on Sections and Section Work.

The scientific and commercial exhibits were of a very high order and justified much more space than can be afforded in this short report.

Your delegates feel that the earnestness, sincerity and impartiality with which the business meetings of the House of Delegates were conducted bears evidence that their efforts were directed solely for the good of Organized Medicine in the United States.

In conclusion beg to offer the following recommendations for your consideration.

- 1. That some procedure be adopted which will reduce to a minimum the dropping from the roll and the reenrollment of members each year.
- 2. The adoption of some method directed toward increasing the Fellowship in South Carolina.
- 3. Consideration of the formulating of a definite program for the State Association.
- 4. The adoption of the plan suggested for Medical Relief in disaster by each County Society.
- 5. The consideration of a constitution as recommended by the American Medical Association.
- 6. The consideration of a definite program to increase the subscription to Hygeia in South Carolina among both the profession and laity.
- 7. In compliance with the wishes of the American Medical Association, your delegates recommend consideration of measures to promote the continuance of discussion and demonstrations at the County Societies of Periodic Health Examinations.
- 8. We recommend that measures be adopted to emphasize to every physician in South Carolina, the importance of confining his use of Proprietary Drugs to those found acceptable for inclusion in "New and Non-official Remedies."

Respectfully submitted,

E. A. HINES,
JOS. H. CANNON.
(Minutes to be continued)

TEXAS BETTER HEALTH SPECIAL

A special health-exhibit train, furnished and equipped by the Missouri Pacific Railroad, was recently operated for a month in Texas. The train consisted of two exhibit and two lecture cars and cars to accommodate the staff of 12 to 15 physicians, sanitary engineers and technicians. The Texas health authorities, local physicians, and the U. S. Public Health Service and other Federal agencies furnished exhibit material and personnel to conduct lectures and demonstrations. One exhibit car displayed a model of a complete dairy farm and a minature pasteurization plant in operation. The train traveled more than 2,500 miles

during the month's tour, stopping at 115 towns and cities. It was visited by 70,000 people.

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ASTARTLING statement this, yet one made by no less an authority than Dr. Elliott P. Joslin of Boston, Mass. In a recent article* he calls attention to the fact that the life span of a certain group of diabetics increased more in the last few years than the life span of a large non-diabetic insured group. This is particularly significant since the insurance company was dealing with presumably healthy individuals whereas the diabetics were handicapped at the start. This lengthening of life of diabetics Dr. Joslin attributes to the introduction of Insulin, exclaiming "He is a pretty healthy man today who can live as long as a diabetic."

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*(New England Journal of Medicine, April 12th, 1928-page 379).

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The Journa of the

South Carolina Medical Association

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GREENVILLE, S. C., SEPTEMBER, 1928

NO. 9

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OF THE

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EDITORIAL

THE FOURTH DISTRICT TO MEET AT SENECA

The largest and oldest of the District Medical Societies of the State, the Fourth District, meets at Seneca, October 2, and the preliminary program indicates that the usual large attendance and enthusiasm may be expected. Dr. Thomas Brockman of Greer, the President, writes that he has invited Dr. Burr Ferguson of Birmingham Ala., to be the invited guest. The meeting at Greer last year passed the one hundred mark and it is hoped that even that record breaker may be duplicated again at Seneca.

The Journal and the State Medical Association headquarters located at Seneca for eighteen years looks forward with keen interest to the coming of the physicians of the seven counties, Anderson, Greenville, Pickens, Spartanburg, Cherokee, Union and Oconee. Every effort will be made to provide for the comfort, edification and pleasure of the visiting members.

THE INTER-STATE POST GRADUATE ASSEMBLY

We have been carrying an ad setting forth the great attraction of the first meeting in the South of the Inter-State Post Graduate Assembly to be held in Atlanta, October 12 to 19, 1928. Many South Carolina doctors will want to take advantage of this splendid opportunity to participate in one of the great medical meetings of the world. This will be also an opportunity for South Carolina physicians to show their loyalty to the profession of Georgia in supporting them in their efforts to bring to the South such a splendid array of visiting clinicians from various parts of the world.

THE THIRD DISTRICT MEETS AT GREENWOOD

According to an advance notice sent out by the Secretary Dr. J. Marion Symmes the Third District proposes to make a new record for attendance and interest at its meeting in Green-wood on October 4. A large number of invitations to out of town physicians have been issued and a splendid program is in preparation. The Councilor of the Third District is Dr. T. L. W. Bailey of Clinton who always renders valuable assistance in making the meetings a success. President Scurry, formerly the highly efficient Secretary, will be able to direct the Society activities in a creditable manner and Greenwood his home town will back up anything he wishes to put across for the good of the Third District.

THE SOUTHERN MEDICAL ASSOCIA-TION

By the time this issue reaches our members details of the meeting of the Southern Medical Association at Asheville, November 12th to 16th, through our ad elsewhere in this issue and through other channels will have reached our members. The Southern grows bigger and better every year and appeals very strongly to the profession of this State. We believe that the Southern Medical Association has been of tremendous value to organized medicine in the South. It is a common get together ground for groups of members of State Associations midway between the State meetings. This arrangement enables State committees, Alumni Associations, State Health Officials and various other groups to make plans for the work in their individual States.

AMERICAN COLLEGE SURGEONS TO MEET IN BOSTON

Elsewhere in this issue will be found an extended notice of the College of Surgeons meetin. A large number of our members belong to this organization and others aspire to member-

ship. Boston is a surgical center of great magnitude and a visit there in October will amply repay the time and expense involved.

JOURNAL AND ASSOCIATION IN LARGER QUARTERS

For the first time the Journal and Association is enable to have quarters devoted entirely to the work of the organization. This embodies a splendid Library and ample space for the other activities of a routine nature. The rooms will provide a meeting place for the County Medical Society and for conferences of the new County Health Unit. The building in which these facilities are located is largely devoted to modern professional offices in the center of one of the most thriving towns in the Piedmont section of the South. The Oconee Medical Society is one of the average County units of the United States numbering fifteen members. It is hoped that the enlarged quarters will prove a stimulus for programs that may be helpful to other societies of similar size. The large city societies all seem to be doing well where-ever located but there is need of much greater developement in the smaller places if organized medicine in America is to come into its own to the fullest extent.

It is hoped also that a closer contact of the State Association with the County Health Department will prove mutually energizing. The cities are well taken of from a sanitary standpoint and the only weak length in the chain of progress in public health is in the domain of rural needs. The State Medical Association has always given cordial support to every phase of rural sanitation until practically half of our State has been covered by County Health Units. Much remains to be done however.

A cordial invitation is extended to the members of the Association to visit their head-quarters at any time they are in its vicinity.

ORIGINAL ARTICLES

TECHNIQUE AND INTERPRETATION OF NEW AND RARELY USED LABORA-TORY TESTS

By W. G. Gamble, Jr. M. D. Laboratory of Clinical Pathology, Medical College State of South Carolina

Nowadays, many medical journals are on the desk of the modern physician. Between their covers are articles dealing with daily problems; interesting case histories and new methods of diagnosis.

These are hurriedly digested in rare intervals of rest. Many physicians say, "That on account of the numerous new laboratory tests, the cryptogram method of reporting and the rapid apparent change in interpretation, they lose much of value in the average history". "That they tend to ignore this meaning and hence forget their value."

The physician occasionally refers his patient to distant clinics. The poor patient returns at last with a sheaf of examinations, included in which are voluminous laboratory reports. Many are unfamiliar or of doubtful value. The general man at times is slightly puzzled, (he well might be) whether these tests were justified and indicated, or if they are principally for the purpose of decoration, as an indication of thoroughness.

This is the age of change, especially is this true in laboratory medicine and numerous tests are being advocated, some few of value, majority chaff. Owing to rapid transportation and concentration of patients, many tests rather uncommon once, are now daily procedures. So 'tis small wonder that the general practitioner struggling to keep up on the clinical side of medicine finds little to memorize a maze of unassociated figures.

Laboratories whose function it is to serve, interpret, and cooperate with the practicing physician, should act as the clearing house for this information. Almost daily we are asked the meaning, the value of this or that test. Therefore, this article is presented.

In spite of the probable misleading effect

of the title, no attempt naturally is made to include all of the new laboratory tests, or even cover those completely. It is manifestly impossible to discuss all the rarely used ones; but only some of those of definite value. The writer makes no clai mof originality. Texts and journals were freely consulted. Doubtless most of these will be familiar to the reader, yet all of us not constantly in touch with a subject, benefit from a review.

Salivary Urea Index. (Hench):

The saliva, as well as blood, and other fluids of the body contain urea. Its concentration approaching that of the blood. It is a fair substitute in office work, but cannot take the place of blood urea estimation.

Technique: From a clean mouth collect 20 c. c. of saliva, obtained by chewing paraffin, in two separate portions. Discard 1st sample. Transfer 5 c. c. of 2nd to beaker. Titrate with 5% Sol. Bichloride of Mercury until one drop of the mixtures added to one drop of Sat. Sol. of Sodium Carbonate, on a porcelain plate shows reddish brown color in three seconds. To calculate, the numbers of c. c.'s of HgCl² Sol X 20 equals Salivary Urea Index. Normally between 30-50, calculate blood urea (S. U. l. X. 1.43)-34 equals approximately blood urea in mg per 100 c. c. of blood. The concentration and dilution test for estimation of Kidney Function:

The 1st measures the concentration power; the latter the diluting ability of the kidney functional units. This is a test useful both to the specialist and general practitioner. It is simple and accurate. Decreased renal efficiency is shown by this method before being demonstrated by others, such as the P. S. P., etc. Technique: Concentration Test:

- 5 P. M. Regular diet. No more food or water after this.
- 8. A. M. Void completely. Throw out specimen. Record time exactly.
- 11 A. M. Void completely. Save. Take quantity and specific gravity. This is the concentration specimen.

Dilution Test:

11 A. M. Drink then 1000 c. c. of water. Drink 500 c. c. of water at 12 noon and 12:30 P. M. Save all specimens voided.

2 P. M. Empty bladder completely and take quantity and specific gravity. The concentration test normally shows a specific gravity as high as 1.025-1.030. The dilution test normally shows quantity voided to be 80-120% of intake and at least one of the samples should be as low as 1.003.

Blood matching. (Vincents slide method modified):

Blood transfusion has become almost a routine procedure. Yet correct matching of blood is absolutely essential or reactions will occur. We present below our modification of Vincents technique.

Technique: On slide, place one drop of donors blood, add four dops of patients serum. (in marked chronic anemias, septicemias, chronic toxemias, and in children where agglutinins may be temporarily weak or partially absent, add six to eight drops of serum). Stir and mix for three minutes at intervals, holding slide against light and look for evidence of granular precipitate or precipitation. Place slide in petri dish containing moistened sponge and keep in ice box for ten minutes. Mix to break up rouleaux formation and observe.

If the need for transfusion is urgent, one may transfuse without further tests, if agglutination does not take place. In children, chronic exhausting diseases, pernicious anemias, septicemias and when patient has received previous transfusion, the patient's cells should be matched against the donors serum in above manner. Van den Bergh reactions:

This is an application of Ehrlich's diazo reagent to blood plasma or serum. There are three kinds of reactions.

Technique: The Ehrlich's reagent consists of two solutions. No. 1. (Sulphanilic Acid 1 gm., Conc. HCl, 15 c. c., distilled water to 1000 c.c.) No. 2. (Sodium nitrite 0.5 gms., distilled water 100 c. c.) Mix 25 c. c. of solution No. 1 with 3/4 c. c. solution No 2. To 1 c. c. of serum add 1 c. c. of this. The appearance in 10 to 15 seconds of a maximum bluish violet color indicates a direct reaction. This means that there is free bilirubin in the blood serum.

Usually seen in cases of obstructive juandice of various origins.

When no color is obtained at once, but a gradually deepening reddish color appears in one to 15 minutes. This indicates a delayed direct reaction. It is an indication of impaired liver function.

If no color at all is obtained, add 2 c. c. of 95% alcohol to 1 c. c. of serum. Centrifuge Pour off supernatent fluid and to it add 1/4 c.c. of Ehrlich's reagent. If positive, we see a violet color. This indirect Van den Bergh is due to protein bound bilirubin and indicates hemolytic or functional jaundice.

The Sabatini reaction is a modification of the indirect and has the same meaning. lcterus Index:

Normal blood serum has minute traces of bilirubin. This yellow tinge becomes deeper in hepatic or hemolytic diseases. This is apparent when no staining of sclera can be seen. This Icterus Index is therefore a sensitive test. It affords a rough easy measure of estimating the degree of jaundice. It determines, then slight changes which clinically cannot be seen.

Technique: Obtain about 3 c. c. of blood. Let clot and obtain serum. Compare serum in a colorimeter or graduated test tube with a 1-10,000 Sol. of Potassium Dichromate. Dilute serum with water to match standard. Read off dilution, which is the Icterus Index. Normal from 3-7.5.

Liver Function Test-Bromsulpthalein (Rosenthal):

The value of test of this is variable. For what are the functions of the liver? Which one is this that we measure. But with diseased liver, this test shows a marked change.

Technique: Use 2 mgs of Bromsulpthalim per kilo. of body weight. Commercial ampules contain in sol. 50 mgs per c. c. Select a suitable vein and inject required amount slowly. After ½hr. has elasped, obtain from another vein 5 c. c. of blood. Repeat in ½hr. Estimate the amount of dye in serum of samples, by adding a few dops of sodium hydroxide. Compare with suitable standards in a colorimeter. The normal individual shows from 0-15% retention. If definite pathological changes are present there is considerable retention.

The Sedimentation time:

A rapid sedimentation time is indicative of inflammation or destruction of tissue. It finds its greatest value in suspected or inflammatory conditions of the pelvis. And determines a favorable time for surgical interference.

Technique: To 0.4 c. c. of 3.8% sodium citrate solution, add 1.6 c. c. whole venous blood. Mix and draw up in 1 c. c. serological pipettes, which are graduated in 1.100 c. c. Observe 1st and 2nd hour, the extent of the clear plasma above cells. Normal for 2 hrs. men, 5%. Women 1-10%. To save time estimate it at the time the cells pass the 18 mm mark. Normally this is from 160-220 minutes. Serum Calcium:

The serum calcium is decreased in rickets and tetany and other conditions of parathyroid insufficiency. It is also necessary in the intravenous administration of calcium, and has been found useful in other conditions.

Technique: It is rather complicated, but consists in precipitating the calcium in the serum with ammonium oxalate. Washing with ammonia hydroxide and converting into calcium sulphate with sulphuric acid, oxidizing with known solution of potassium permanganate. The normal runs form 9 to 11 mgs per 100 c. c. of blood.

Diastatic Activity:

In normal individuals apparently there is ratio between activity of diastatic ferment of the blood, and the internal secretion of the pancreas. In certain diabetic individuals, one can control or lower the blood sugar to normal. In others this cannot be accomplished. Some diabetics have relatively low blood sugars, considering the severity of the disease.

Sometimes the probable explanation for this can be found in the diastatic activity of the blood. A high diastatic activity gives a high blood sugar. The diastase is increased in hyper-function of some of the glands of internal secretion. (Pancreas included).

The technique is found in any complete work on blood chemistry. The normal runs from 15-20 units.

CO2 combining power of blood plasma:

This is a useful, but little used test in the average hospital. It is of real value when acidosis is suspected or present, when giving alkalies in coma of undetermined origin and

certain toxic conditions. The normal is from 53 to 75 vol. per cent.

The technique can be found in any well written laboratory manual. It is simple, but for dependability, one should have practice.

Hydrogenion Concentration of blood:

This test is used with the above, and is applicable in the above conditions. It is simple, and should be used more frequently. By this, changes in the reaction in the blood, can be detected long before manifested by clinical symptoms.

It consists of comparing the serum or plasma with known indicators, a colorimetric method. The average human blood is from P. H. 7.35-7.43. Bleeding time (Duke):

The general opinion is that the bleeding time is linked up with the coagulation time and is interchangeable. It does not, sometimes to our sorrow, parallel the coagulation time. It is prolonged in all instances where the blood platelets are low. This applies also to chloroform and phosphorus poisoning and when the liver is being destroyed by rapid infections, etc. It is not prolonged in hemophilia. Therefore, the coagulation time and bleeding time are best performed together.

Technique: With a sharp Hagedorn needle make a fairly deep clean cut in the lobe of the ear. Blot every 30 seconds. When blood does not stain, bleeding has ceased. The time is from the 1st appearance of blood to when this is found. Normally from 1-3 minutes.

Blood Platelet counts:

I must be pardoned for mentioning the above, but it is included here for the sake of warning. Solutions for counting must be fresh, made the same day, and counts to be reliable must be done by one who has considerable experience, if not, all kinds of bizarre results will be obtained.

With the increase in the number of surgical operations, and the apparently numerous number of purpuras, sometimes the bleeding time is not of sufficient accuracy. It is indicated in hemorrhagic diseases, in operations involving the removal of the spleen, and when there has been a history of bleeding. The normal platlets are from 250,000 to 350,000.

Clotting time (Modified):

As this has been mentioned, a simple me-

thod for doing same has been included. It is indicated in same conditions that the bleeding time is used. It should always be done before tonsillectomies and should be combined with the bleeding time.

Technique: Upon fine capillary glass tubing, make deep stab in ear so that blood flows freely. Fill capillary tube by capillarity. Break off 1 cm portion every 30 seconds until fibrin filaments span a .5mm gap. The time from the 1st appearance of the drop of blood until the above takes place, is the clotting time. This is from 2-5 minutes normally, using this method.

Blood Cultures:

The indications for these are too well known to need any discussion. It is no longer necessary in all cases for the bacteriologist to come to the patients bed side to take blood for culture, provided a little care has been exercised. This method has then an especial appeal to rural sections.

Technique: Using especially large Keidel tubes containing the required medium (These tubes can be bought already prepared from commerical houses for 50 cents each), sterilize the arm carefully and draw blood with the tube in the manner indicated, using extraordinary care to prevent contamination. Mail to bacteriologist in especially built container.

Conclusion: The writer hopes that these few suggestions have revived forgotten memories and therefore, compensate for the time lost in reading, if so then this article has achieved its purpose.

THE CONDUCT OF LABOR AND THE USE OF ANESTHETICS*

Lester A. Wilson, M. D., F. A. C. S., Professor of Obstetrics, Medical College of the State of S. C., Charleston, S. C.

In approaching this subject let us consider for a moment the statistics of our own state, which will give us an idea of the dangers to be guarded against. In South Carolina annually there are between 600 and 700 women and 4,400 babies under one year of age who die chiefly as a result of reproduction. One-half of the maternal deaths or 300 are due to the accidents of pregnancy, the prevention of which has been dealt with in the preceding paper. The other 300 maternal deaths are due to the accidents of labor. Puerperal infection causes approximately 125 deaths, operative interference about 125 and the hemorrhages about 50. We cannot estimate the number that escape death only to be imprisoned in frail, deformed or diseased bodies. Therein lies much of the tragedy which follows this supposedly normal function. Our mission in conducting a case is to prevent mortality and to leave both patients in good condition for future health. It is our further privilege and duty to relieve the pain and horror of this trying ordeal as much as we can with safety.

With the idea in view of limiting the use of midwives in our rural districts especially among the poor and indigent I would like to suggest a plan which has been in my mind for sometime. Would it not be possible to arrange obstetrical teams similar in some ways to the operating teams of the A. E. F.? These teams should consist of a local physician and one or more colored trained nurses whose duty it would be to hold prenatal clinics and to care for cases during labor. The fee now paid midwives could be collected to help defray expenses of this experiment. I have come to the conclusion that organized prenatal clinics must be extended to include supervision during labor and the puerperium if much benefit is to be derived from them. This is the system used in the out-Patient-Department at Roper Hospital.

To reduce the accidents of labor and to better care for those that do occur, patients should all be delivered in suitable surroundings, preferably in a hospital. This is not practical at present on account of insufficient hospital beds, however we can arrange a suitable room and equipment in the home and provide efficient assistants if necessary we can train them ourselves. Another important point is to see that the patient goes into labor by the time she is due. This can usually be correctly ascertained if we have kept a record of our patient's symptoms during pregnancy as they appear and disappear and by estimating the size of the fetus in utero. I do not believe that labor is due on

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a definite date but that there is a period of maturity beginning perhaps a week ahead of the figured date and lasting for perhaps a week beyond that time. During this interval the fetus increases in size very rapidly and is the cause of many complications. Labor can be induced in the majority of instances by Castor Oil. The first dose is given about one week before the expected date of confinement. If this does not cause the patient to go into labor by the expected time a second dose is given with from ten to twenty grains of quinine, hot enemas, etc.

The preparation for delivery which I prefer is as follows: The lower bowels should be thoroughly cleansed by enemata, the vulva shaved or clipped, washed with Lysol solution and painted with 1% Tincture of Iodine in alcohol or 4% solution of mercurochrome and the patient draped with sterile linen. The doctor and his assistants if he has any should be gowned and gloved with the same aseptic technique that is used when performing a laparotomy. The patient should be in the dorsal position with the knees in stirrups and the head be delivered between the pains by Ritgen's method. Early in labor a careful examination should be made for diagnostic purposes. Fetal heart sounds should be counted every hour during the first stage of labor and every half hour during the second stage to elicit fetal distress. See that the bag of waters ruptures as soon as the cervix is fully dilated, for after that time it retards labor. Do not give douches as they are apt to spread infection. Make rectal instead of vaginal examinations but when the latter are deemed necessary use the same careful aspsis that is used in the delivery room. Recently I heard the statement that pituitrin ought not to be made. I do not agree with this, but it seems to me that experienced obstetricians*should standarize the dose and conditions in which it could be safely used. Pituitrin should never be given in over three minim doses, and should always be given with an anesthetic. It should not be repeated. The position must be normal with the head on the perineum and the cervix fully dilated. Pituitrin might be considered as a drug-forceps only it is not nearly as safe as the use of instruments. In the treatment of post-partum

hemorrhage pituitrin is very valuable, and occasionally in the induction of labor. During the third stage of labor see that all lacerations are repaired. Recently I have been repairing old perineal lacerations and removing hemorrhoids with excellent results.

One of the most important decisions in the conduct of labor is that of interference. The old idea of watching a clock and only delivering by operatives measures after so many hours is wrong, except for the novice. If the patient has not made suitable progress for the amount of force which has been exerted by the uterine contractions and if there is a mal-position which might be corrected we are then justified in interfering. Exhaustion of the mother or fetal distress of course points toward rapid delivery also. The cervix must be fully dilated before any attempt at delivery is made and if the head is out of the cervix so much the better. Never allow a uterus to become exhausted, as it only increases the difficulties and complications.

In breech presentations deliver by extraction as soon as the cervix is fully dilated and the breech on the perineum, with the patient completely anesthetized. Deliver the feet by Pinard's maneuver and the arms by introducing the index finger alongside of the humerus bringing them down over the child's face. The head is delivered by making pressure just above the symphisis pubis, forcing the head through the pelvis. I consider the Smellie Viet or Morreceau method of delivering the after coming head obsolete.

Operative induction of labor in the moderately contracted pelves or disproportion between the head and pelves has given very poor results. Statistics show a larger number of infants are lost in this way than if allowed to go full term. The best treatment is to give the test of labor or trial labor which is to let the patient go into labor spontaneously and then if after four hours of second stage pains the head is not engaged deliver by laparatomy. hemorrhage always differentiate partum carefully between placenta previa and premature separation of the placenta. This can only be done by digital examination of the cervix. In placenta previa the placenta can be felt attached within the cervix, while in premature

separation it cannot be palpated. When making this examination be sure to have facilities ready for controlling an active hemorrhage which the examination might cause. Premature separation of the placenta must be delivered at once, and rapidly as there is no way to control the hemorrhage until the uterus is emptied. In placenta previa rapid dilatation of the cervix is contraindicated. In this condition control the bleeding by means of a large Voorhees bag or packing until the cervix is fully dilated after which the case may be delivered by version or forceps. In central placenta previa or the complete separation of the placenta, Cesarian is the operation of choice, as the uterus can be removed if a fatal post-partum hemorrhage threatens. Blood transfusions should not be overlooked.

For relieving the pains of labor the anesthetics which might be considered are ether, chloroform, nitrous oxide and oxygen; and Gwathmey's synergistic anesthesia. operative cases ether is the anesthetic of choice. For normal deliveries chloroform or ether may be given during the last thirty minutes of labor, beginning with a few drops during each pain, increasing this until the patient is sound asleep as the head passes over the perineum. Nitrous oxide and oxygen analgesia is probably the best all round anesthetic we have. Its advantages are that it puts the patient to sleep quickly and does not stop muscular action, and it can be given for as much as four hours. Its disadvantages are that it is expensive, it requires expensive apparatus, and a trained anesthetist. Technique: The mixture varies in each case usually 90% Nitrous Oxide and 10% Oxygen is used. The patient is instructed to notify the anesthetist as the pain is coming on, and she is given three or four inhalations of a suitable mixture after which she holds her breath and bears down with the pain. This precedure is continued and the anesthetic increased until the head is on the perineum at which time the patient is put soundly to sleep for delivery. Gwathmey's synergistic anesthesia is one of the latest, and is very valuable. The technique is as follows: After labor has definitely started, the lower bowels should be washed out with two enemata after which the patient is given a 1/6 grain of morphine in 2 cc. of a 50% solution of Magnesium Sulphate.

If her pains continue she is next given the rectal instillation which consists of 2½ oz. of ether, 2dr. Alcohol and olive oil, or petrolatum q.s. to 4 oz. Some also give 20 grs. of quinine alkaloid. I have found these percentages vary slightly depending on the size of the patient. A 4 oz. syringe with an ordinary catheter is usually used for this instillation although the gravity method is all right. The patient is placed on the left side, hips elevated, and thighs flexed. The injection is given high up into the rectum, very slowly, usually taking twenty minutes to prevent it from being expelled. The patient should be kept in a darkened quiet room and under constant supervision. The fetal heart sounds and cervical dilatation should be watched very closely. This injection is usually effectual for four to six hours, and if necessary a second injection may be given without the alcohol. It is advisable to give a small amount of ether by inhalation as the head passes over the perineum. I have used instead of ether, nitrous oxide and oxygen and found it very satisfactory.

RECURRING HEAD COLDS*

Thos. R. Gaines, M. D., Anderson, S. C.

The U. S. Public Health Service data (1) given out in 1924 showed that, of a fairly representative group of persons, 90% had a cold during a period of 5½ months study, and that the individual averaged 3.7 colds per year.

Having spent several years in general practice the writer is aware of the problem before the physician in the disposition of that class of patients presenting cold after cold and demanding relief.

The intention of this paper is to bring about a closer working basis in these cases between the family physician and the rhinologist. It is my belief that the majority of these patients present either a mechanical cause within the nose, or naso-pharynx, or an infection in some sinus, and that every case should be gone over by a competent rhinologist. The lack of interest shown by the average practitioner in these cases is very discouraging to the patient and

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leads him to self-treatment with home remedies and patent medicines. When we come to recognize that the majority of such cases present an abornmality, a pathologic lesion, with indications for surgical relief as clear cut as those for an appendectomy, we will have taken a step in the right direction.

Anatomically, the upper respiratory passages consist of the nose, with the paranasal sinuses, the naso-pharynx, the pharynx and larynx.

This discussion will deal principally with the nares and connecting sinuses. The nares consist of two irregularly shaped cavities, beginning with the nasal orifice in front and ending with the naso-pharynx posteriorly, separated by the nasal septum situated in the mesal plane. These cavities, are lined by mucous membrane, beneath which lies the perichondrium or periosteum. Their mesial boundaries consist of the septum, which is composed of cartilage anteriorly and bone posteriorly. Above is the cribriform plate and the junction of the lateral and medial walls. Laterally is the outer bony wall presenting the superior, middle and inferior turbinates, with their corresponding meati. This is the area into which all the sinuses drain. Briefly the sinuses are from before backward, the maxillary, frontal, ethmoid and sphenoid.

ETIOLOGY: Being the port of entry for inspired air, infecting organisms are present at all times. However, with (a) normal body resistance, (b) free drainage, and (c) free areation, these organisms are usually resisted. Then anything which interferes with either of the three factors above mentioned is an etiological factor. Among the most frequent causes of lowered resistance are exposure, the acute exanthemate, tuberculosis and syphilis. Less commonly are the other chronic and wasting diseases a cause.

In connection with the etiology, mention should be made of allergic reactions within the nose. Strictly speaking, hay fever does not come within the title of this paper. However due consideration should be given the nasal manifestations of food, dust, animal, and pollen sensitizations.

Insufficient drainage is caused by deviated

or deflected septa, hypertrophied and hyperplastic turbinates, tumors, hypertrophy of tonsils and adenoids, atresia of choanae, foreign bodies and anatomic features, such as the ostii of sinuses being placed higher than the floor. making the drainage contrary to the law of gravity. Of prime importance is the first named cause, i. e., deviations of the septum. Occasionally are seen deviations of such proportions that almost complete occlusion of one or both nares exists. These deviations may be S shaped and cause an anterior blocking of one side and a posterior of the other. If the deviation is opposite the middle turbinate body. here may be a resultant blocking of a sinus due to pressure of the turbinate against the lateral wall. This is easily understood when we remember that three of the sinuses, maxillary, frontal and anterior ethmoid, drain just beneath the overhang of the middle turbinate. Hypertrophied and hyperplastic turbinates may block sinus drainage in the same manner. They also contribute to cold catching through the fact that two surfaces prought into close contact, by friction and irritation, increases likelihood to infection. Tumors may act in the same manner. Enlarged adenoids and tonsils block off the naso-pharynx, preventing free drainage backward, as do atresias.

Insufficient areation, in general, may be said to arise from the same causes mentioned previously under insufficient drainage.

SYMPTOMS: are too well known for lengthy description. Sneezing, dryness of nasal passages, soon followed by out-pouring or secretions, malaise, lacrimation and sometimes frontal headaches. Under appropriate treatment the condition may be arrested here, or may proceed to the stage of purulent discharge and sinus involvement. (Or re-involvement).

COMPLICATIONS: The most frequent is an ethmoiditis. In fact it occurs so often that it is difficult to say whether it is a cause or a complication. It might be classified at first as as a complication and then as a cause of the recurrences. The other sinuses are probably involved in the following relative frequency; maxillary, frontal and sphenoid. Another very common sequelae is a tubal catarrh. This is a common disorder in this section of the country. The infection travels upward through the

Eustachian tubes and the recurrent infections soon cause a chronically infected and thickened tubal wall with a partial stenosis. As a result we have a "stopped up feeling" in the ears, adventitious noises and partial loss of hearing. In children, due to the shape and direction of the tubes, an acute otitis media frequently develops while in adults there is often a chronic catarrhal otitis media. Pharyngitis, tonsillitis and laryngitis are also complications and sequelae. An intractable, but persistent simple larygnitis should always make one think of some chronic infection higher up in the passages, especially a sinusitis.

DIAGNOSIS is practically always made by the patient.

PROGNOSIS is very variable, dependent upon whether or not a thorough search is made and the cause found. If an examination discloses only a rhinitis or naso-pharyngitis with well formed nares, good ventilation and drainage, the outlook is favorable. Under these conditions, if colds are frequently recurring, the attention should be directed elsewhere, especially to the chest. A thorough physical examination will probably show some systemic trouble which is causing a loss of body resistance. The finding of any of the mechanical faults listed under etiology, or of an infected sinus, make for a favorable prognosis provided the cause is eradicated. Otherwise we may look forward to a continuation of the colds.

PROPHYLATIC AND PREVENTATIVE TREATMENT can be carried out most effectively through the employment of regular physical examinations, the noting of defects, and their correction before the "vicious chain" is started. The wearing of proper clothing, the avoidance as much as possible of sudden temperature changes, proper ventilation of homes and places of public gatherings, are all important, and the laity, especially the better class, is now very well informed on this subject.

CURATIVE TREATMENT. In the acute stage a mercurial, or castor oil, with a Dover's powder and hot foot bath on retiring, is the classic treatment. A mild alkaline nasal douche may be prescribed. If possible a visit to the rhinologist, where the mucosa may be shrunk and 2% silver nitrate applied to the ethmoid region, will shorten the duration. Following

the acute stage it is especially advisable that a rhinologist go over the case thoroughly. All pressure points are noted, as well as the condition of the turbinates, the septum, the nasopharynx, the pharynx and larynx. Discharge and the point of its emergence on the nasal wall, together with the condition of the musous membrane, is of importance. Finally, transillumination and the x-ray are utilized for sinus diagnosis. Results of the examination are summarized and all causative factors removed, at the earliest time conditions will favorably permit. This procedure, conscientiously carried out, will in most instances put an end to the trouble.

Should no pathology be found it is advisable to test out the patient for the various substances which might cause an allergic reaction within the nose. Any one or more giving a positive reaction, the patient is immunized as in hay fever.

In those cases where no causative agent can be found, or it is inadvisable to resort to surgery, recourse may be had to stock or autogenous vaccines. In several years of general practice the writer used both stock and autogenous vaccines with disappointing results in the majority of cases. Repplier and Leaman (2) report 125 cases inoculated with stock vaccines for colds. These cases were supposedly free from nose and throat infections. 30.4% were completely successful. 52.8% showed markedly increased resistance to upper respiratory infection for one year. It is interesting to note that whereas their patients had no nose or throat infections, their percentage of successful inoculation was high, while the average physician who uses the vaccine on all cases, including those with nose and throat infections, has a much lower percentage of successful inoculations.

SUMMARY: (a) Recurrent colds are a great source of economic waste to the country.

- (b) The majority of these cases present clear cut indications for treatment when thoroughly gone into.
- (c) There should be a more widespread dissemination of the knowledge that colds do not "just happen", but have a cause which can often be removed.

Reférences: (1) Medical News, J. A. M. A., Dec. 6, 1924. (2) Journal Industrial Hygeine, March, 1927.

DICUSSION

Dr. E. W. Carpenter, Greenville: Judging from the frequency of the occurrence of this disease, I thing by all odds this paper is the most important to come before this meeting. Nobody knows the primary cause of acute colds; no organism has ever been discovered which will reproduce the disease. The secondary causes are: First, resident pathology in the nose and throat; second, disturbed function of the ductless glands; and, thirt, lowered vital resistance. Anybody who is competent to talk about the causes of lowered vital resistance could talk until the end of time on that one point. As to the treatment in the primary stage, the remedies for the treatment of head colds are as many as the stars in the heavens. In the secondary stages, the treatment consists of the removal of the secondary causes.

Dr. J. L. Sanders, Greenville: The subject of colds will occupy the attention of rhinologists as well as of general practitioners as long as people have noses. One of the important features of colds is a diagnosis, and a subsequent differential diagnosis, upon which depends the treatment. Colds in children, especially small children, which the great number of you men come in contact with, you must make differentiation and rule out lues, which, as you know, gives the manifestation of a cold. Secondly, early sinus infection or mucocele of a child's sinuses will give the symptoms of a cold in addition to bronchial symptoms and is very frequently diagnozed as tuberculosis. Often Bronchiectasis may follow these conditions. Third, the apparent cold of pregnant women. I used to wonder why it was that many pregnant women apparently had nasal obstruction. From my experience I find that during pregnancy, due to the congestion of the tissues of the nose, the erectile tissue, so-called, we have obstruction of the nose. The treatment is temination of pregnancy.

In adults, as Dr. Gaines has stated, we have infection of the mavillary sinuses, as well as the ethmoids—more, in my experience, in the maxillary than the ethmoids; then you have recurrences, unless drainage is established. So you must make a differentiation in the causes of the so-called colds. If colds are neglected they will

run on into the pus stage, and then you have an empyema of one or more of the sinuses, with the systemic conditions which lead on, as you know, to more serious systemic disturbances.

As to the treatment of these cases, that is the most important thing, I think, after you have made a diagnosis. If, in children, lues is the cause, the treatment, of course is for lues. If tonsils and adenoids cause obstruction, then they should be removed. If a child develops running nose and cough and it is not practicable at that time to remove the adenoids and tonsils, give the little fellow relief by dropping twenty-five per cent, solution of argyrol into the nose. If that does not give relief, use gentle suction. I have under treatment now a little fellow four-teen months old. Argyrol did not suffice, and I used the suction. He would yell, and that would help the suction to operate.

In the treatment of adults a good saline purgative is very valuable. You will be surprised to find what relief one will get from a cold in the head by a dose of saline purgative. I have seen relief in thirty minutes from a dose of epsom salts. Then if you are not in position to use packing yourself, drop argyrol into the nose, using a fresh solution, as a solution even a week old is irritating. It is surprising to see what you blow out of the sinuses. If suction does not relieve the trouble, then locate the sinuses in which the pus is present and use proper operative measures to insure drainage, and you will relieve the cause of the cold.

Dr. J. F. Townsend, Charleston: What the essayist said about the cause of recurring colds is absolutely true, but I think we specialists are very apt to look at our own individual part of the patient's anatomy a little too much. The purpose of food, of course, we know is to nourish and build up a person, but it really has a more important value than that. Certain articles of diet predispose children to colds, just as certain articles of diet make them unhealthy in other ways. For instance, too much candy and other things of that kind give children a predisposition to colds, not so much from the quantity of candy but because it takes the place of foods they should have. A high vitamin diet seems to prove of great benefit in the nutrition of patients with regard not only to the prevention of colds but in discharging ears, etc. In other words, in the prevention of recurring colds the general treatment and general nutrition of the child are very often of as much value as the elimination of the local imperfections in the nose.

SOCIETY REPORTS

CHESTERFIELD COUNTY MEDICAL SOCIETY MEETS

We held our regular monthly meeting at the home of Dr. R. L. Gardner, Chesterfield, S. C., August 14th, at 8 P. M. At the "zero hour" Dr. Gardner ordered us over the "top" and we captured the dining room with little resistence from the enemy. "To the victor belongs the spoils," and we arrived just as Dr. Gardner had prepared one of his famous "Pine Bark Stews", nuff said!

After this feast our Commanding General (Dr. J. S. Gaskins) took personal charge and put us through the usual drill on Parliamentary Laws. The following doctors and visitors took part in extended order drill; R. L. Gardner, C. A. Bolt, O. H. Purvis, D. T. Teal, J. S. Gaskins, R. M. Newsom, D. C. Griggs, R. J. Coney, J. B. Neese and P. H. Hearn.

Symposium on Precordial Pain. Essayist: Drs. R. L. Gardner and R. J. Coney. Every member present was called upon to express his views on this great scientific problem.

The following orders were then issued: You are ordered to duty at the home of Dr. R. J. Coney, Cheraw, S. C., the 11th of September next, at 8 P. M. Dr. D. C. Griggs and Dr. C. A. Bolt will furnish the plans for this attack.

R. J. Coney, M. D., Adj. Secretary.

RIDGE MEDICAL ASSOCIATION

The Ridge Medical Association met in Batesburg the twentieth of August with a larger attendance than usual.

Drs. M. E. Hutchinson and Theo Dubose of Columbia met with us and participated in our discussions, etc.

Dr. W. T. Gibson gave a good discourse on typhoid fever and its cause and prevention with special emphasis on its prevention.

Dr. M. E. Hutchinson gave an instructive discourse on tetanus, its cause, treatment and prevention with report of some cases.

These papers elicited much discussion and favorable comment.

Dr. Timmerman reported a case of fever with unusual symptoms.

Drs. S. J. Smith and W. T. Gibson took active duty training at Fort Bragg in August.

Drs. W. P. Timmerman took active duty training at Fort Moultrie in July.

Dr. and Mrs. W. H. Shealy have left us and located at Sharpsburg, Maryland.

They were very active in associational and religious work and we shall greatly miss both of them. They are here now for a short visit to some of their relatives and friends,

We secured three new members at our last meeting. One of the members, Dr. L. C. Brooker, of Swansea, was nominated for the House of Representatives in our recent primary by a very complimentary vote, he having lead the ticket.

The following named were chosen as officers for the ensuing year:

Dr. W. T. Gibson, President.

Dr. James Crosson, Vice-President for Lexington County.

Dr. J. D. Waters, Vice-President for Saluda County.

Dr. A. R. Nicholson, Vice-President for Edge-field County.

Dr. W. P. Timmerman, Secretary-Treasurer.

Supper was served at the Commercial Hotel, where short speeches were made by Drs. Dubose, Hutchinson, Brooker, Crosson, Gibson and others on organization, politics, medical science, cooperation, etc.

W. P. Timmerman, M. D., Secretary.

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SOCIETY, HELD IN THE CLUB DINING ROOM OF THE POINSETT HOTEL, MONDAY, AUGUST 6TH, 1928.

The meeting was called to order at 8:30 P. M. by the acting president, Dr. C. Q. West with about thirty-five members and guests present.

This was a joint meeting of the County Delegation and Medical Society to discuss the typhoid epidemic in Greenville County.

There was much discussion of the subject, the following members of the Delegation and Society taking part: Hon. J. L. Love, Hon. W. H. Keith, Drs. C. B. Earle, Wilkinson, Black, B. H. Earle, McCalla, Tyler, Pollitzer, W. T. Brockman, Brown, and Barksdale.

Dr. Wilkinson moved that the County Delegation be requested to enforce the Standard Milk Ordinance; seconded and carried.

Dr. Tyler moved that a special committee be appointed to consult with the County Health Department relative to the typhoid epidemic; seconded and carried. Dr. West appointed Drs. Wilkinson, W. T. Brockman, Pollitzer and Tyler on this Committee.

The applications for membership in the Society

from Drs. S. R. Gaston and J. W. McLean were then submitted. Dr. Wilkinson moved that they be elected members; seconded and carried.

There being no further business the meeting adjourned.

A buffet supper was served following the adjournment.

Irving S. Barksdale, M. D., Secretary.

CLINICAL CONGRESS OF THE AMERICAN COLLEGES OF SURGEONS WILL MEET IN OCTOBER

The American College of Surgeons will hold the eighteenth Clinical Congress in Boston, October 8-12. Headquarters will be at the Statler Hotel and meetings will be held in the ballroom of the Copley-Plaza Hotel and Symphony Hall. The Hospital Standardization Conference will be held in morning and afternoon sessions in the ballroom of the Copley-Plaza Hotel Monday, Tuesday, Wednesday, and Thursday. An innovation this year will be the commencement of the clinics in the Boston hospitals on Monday afternoon, continuing through the mornings and afternoons of the following four days. Monday evening's program will include an address of welcome by the local Chairman, the address of the retiring President, Dr. George David Stewart, New York, the inaugural address of the new President, Dr. Franklin H. Martin, Chicago, and the John B. Murphy oration on surgery by Professor Vittorio Putti of Bologna, Italy. Tuesday, Wednesday and Thursday evenings' sessions will be held in the ballroom of the Copley-Plaza Hotel. At the Wednesday evening meeting the visiting surgeons will be the guests of the Boston Surgical Society at a special meeting when the Bigelow medal is to be awarded. On Friday evening the Annual Convocation of the College will be held in Symphony Hall when the 1928 class of candidates for Fellowship in the College will be received. The fellowship address on this evening will be delivered by Dr. William J. Mayo. The annual meeting of the Governors and Fellows will be held Friday afternoon and will be followed by a symposium on Traumatic Surgery to be participated in by leaders in industry, labor, indemnity organizations and the medical profession. Ether Day will be celebrated in the Dome Room of the Massachusetts General Hospital on Friday when a bronze bust of William T. A. Morton will be presented to the hospital. It was in this building that ether was first administered for the production of surgical anaesthesia on October 16, 1846. Several newly completed medical motion pictures produced under the supervision of the American College of Surgeons and approved by it will be shown during the Congress. Reduced fares on the railways of the United States and Canada have been authorized to those holding a convention certificate so that the total fare for the round trip will be one and one-half the ordinary first class one-way fare. Other outstanding features will be the exhibits. In addition to the commercial exhibits the departments of the College will present scientific exhibits. A number of distinguished foreign guests of international reputation have signified their intention of attending. The Chairman of the Boston Committee on Arrangements is Dr. Frederic J. Cotton.

SECOND DISTRICT MEDICAL ASSOCIATION

The Second District Medical Association (Aiken, Edgefield, Lexington, Richland and Saluda Counties) met at Aiken, S. C., July 17, 1928, for its summer meeting.

The meeting was held at the Hotel Aiken where a delicious supper was served. Much credit to the success of the meeting was due to Dr. L. D. Boone, of Aiken, who cared for arianging the place of meeting, etc.

At six P. M. Dr. O. P. Wise of Saluda, Vice-Pres., called the meeting to order. After the roll call and payment of dues the minutes of the Batesburg, S. C., meeting were read and approved.

Dr. A. T. Moore, of Columbia, reported some interesting cases of Sciatica. Dr. S. E. Harmon, of Columbia, discussed Ruptured Duodenal Ulcer and stressed the classical symptoms, the diagnosis and the treatment. Dr. L. D. Boone read an interesting paper on "A Few Problems Encountered in Industrial Practice." Facts of the importance of a thorough physical examinations were emphasized in this paper Dr. B. F. Wyman of the State Board of Health related what is being done for the midwives in the State and how thorough they are being trained. "They are taught what to do and what not to do." A general discussion followed which was closed by Dr. Hayne. The speaker of the evening was Dr. W. R. Houston of the Department of Medicine, Augusta, Ga. Dr. Houston gave an interesting as well as instructive address on "The Pathogenic Right Colon," also known as Floating Kidney. He reported several cases of interest and gave remarks on the importance of keeping this trouble in mind.

Under new business the following officers were elected to serve until July, 1929.

- O. P. Wise, M. D., President.
- L. D. Boone, M. D., Vice-President.
- T. D. Dotterer, M. D., Secretary and Treasurer. Batesburg was chosen as the next place of meeting.

MINUTES

MINUTES—HOUSE DELEGATES CONTINUED Report of Committee on Hospitals

Dr. J. W. Beeler Chairman

"The Committee met early in January, and following that the South Carolina Hospital Association met and the South Carolina Nurses' Association met. A committee of three was appointed from each. These committees met and went over the question of the failure of the girls and requested a meeting with the Board of Examiners of the state. A meeting was held this morning, and we are going to try between now and the June meeting to work out some plan for raising the standing of the hospitals and try to do away with some of the failures.

"It being hard to get such a large group together, the committee could make no report until the State Board of Examiners met and the committee met with them."

The report of the Committee on Necrology was then called for. Dr. R. E. Hughes, the chairman, being absent because of illness, Secretary-Treasurer Hines read a list of the names, addresses, and dates of death of the deceased members. On motion of Dr. Hines, the audience stood for a moment in respect to the memory of the deceased.

President Smith called for the report of the Committee on Publicity to Promote Periodic Health Examinations in South Carolina, and Dr. R. M. Pollitzer, Chairman, stated that the committee had not functioned.

Dr. R. S. Cathcart, Chairman, read the report of the Committee on Medical Education.

The report of the Special Committee on the Sims Memorial being called for, Dr. E. A. Hines, a member of the committee, reported that the committee had been unable to hold a meeting.

Dr. W. P. Timmerman moved to consider the report of the Council and asked for information about the re-examination of physicians. Dr. S. E. Harmon, Chairman of the Council, asked Dr. T. A. Pitts, of Columbia, to present the resolution referred to in the report of the Council; and Dr. Pitts offered the following resolution:

The resolution was discussed by Dr. Olin Sawyer, of Georgetown, who then moved that it be laid upon the table. Motion seconded and carried.

New Business

Dr. E. F. Parker, of Charleston, brought up and discussed the subject of tonsil-adenoid clinics, offering the following motion: "That the House of Delegates go on record as disapproving en masse clinics. The motion was seconded and was discussed by Drs. Olin Sawyer, Georgetown; J. W. Jervey, Greenville; E. F. Parker; C. W. Kollock, Charleston; and by Dr. D. B. Frontis, of Ridge Springs, who moved that it be tabled for the present. The motion to table was not seconded. Dr. Parker then withdrew his motion.

Dr. Kenneth M. Lynch, Charleston, as chairman of a committee from the Charleston County Medical Society to present to the South Carolina Medical Association a proposed bill for regulating expert medical testimony, read the following resolution and moved its adoption. The motion was seconded and carried and the resolution adopted.

Dr. George T. Tyler, Greenville, moved that the Secretary each year write the ex-presidents who can not attend the annual meeting and extent to them the felicitations and good wishes of the Association. Motion seconded and carried.

Dr. J. T. Taylor referred to the statement in the President's message that the Secretary of the State Board of Medical Examiners had repeatedly failed to answer communications about its work, among them one from the President, and asked that the Secretary of the Board be given a chance to state whether he had ever received such communication. Dr. A. Earle Boozer, Secretary, stated that President Smith's letter had not been received. The Secretary's conduct of the business of the Board was discussed by Dr. J. J. Lindsay and by Dr. Boozer, and later by Dr. N. B. Heyward, of Columbia, and Dr. J. T. Taylor, Adams Run.

Secretary-Treasurer Hines read the following resolution from the Newberry County Medical Society:

"Whereas the Medical College of the State of South Carolina is and has been overcrowded for some time, it being necessary to turn away several students each year, a number of whom are South Carolina boys; and

"Whereas the college failed to secure appropriations for new buildings, equipment, and personnel, as requested for 1928.

"BE IT THEREFORE RESOLVED that the Newberry County Medical Society go on record as requesting the President of the South Carolina Medical Association to present to the House of Delegates of the South Carolina Medical Association the claims of this institution, looking to the expansion of the same to the point at lest of caring for the educational needs of the young men and young women of South Carolina."

Dr. William Weston, Columbia, moved that the House of Delegates indorse the resolution. Motion seconded and carried.

Dr. J. W. Jervey, Greenville, offered the following motion: "That the House of Delegates direct the delegates of the South Carolina Medical Association to the American Medical Association to reopen in the next meeting of the House of Delegates of the American Medical Association the matter of a resolution originally introduced therein by Dr. E. A. Hines providing for the deduction from taxable income of expenses incurred by a taxpayer for medical treatment, etc., for himself or his family." Motion seconded; discussed by Dr. J. T. Taylor, Adams, Run; when put to vote it failed to carry.

Invitations were extended to the Association to meet in 1929 in Greenville, in Columbia, and in Charleston. Secretary Hines read several invitations and communications. Dr. E. F. Parker moved that Charleston be selected unanimously. Motion seconded by Dr. J. W. Jervey and carried by a rising vote.

President Smith asked the fraternal delegates from Georgia to come forward and be introduced—Dr. Wm. A. Mulherin, President of the Georgia State Medical Association, Augusta, and Dr. Henry M. Michel, Augusta. Dr. Michel and Dr. Mulherin expressed their pleasure in being able to attend the meeting and extended cordial greetings and best wishes for a successful meeting from the Georgia Medical Association.

Dr. W. P. Timmerman, Batesburg, moved that the House of Delegates memorialize the legislature to change the law governing the election of members of the Executive Committee of the State Board of Health in order to provide that one member thereof be elected by the House of Delegates each year. Motion seconded, Dr. J. W. Jervey made the point of order that, since this would involve amendment of the constitution and by-laws the motion must be submitted in writing and acted upon at a subsequent meeting.

Dr. McLeod then moved to proceed with the election of officers. Motion seconded and carried.

Election of Officers

President Smith called for nominations for president.

Dr. C. W. Kollock, Charleston: "Forty-four years ago I joined this society; thirty years ago I was president. There are very few men in this room now who were present when I was president, but there is one man in this association who has been a member for more than thirty years and who has done good work in this society and I think should be rewarded by being made its presiding officer. I therefore nominate Dr. Robert E. Hughes, of Laurens, for the office of president."

Nomination seconded. Motion that the nominations be closed and the unanimous vote of the Association be cast by the Secretary; motion seconded and carried.

Other officers were elected as follows:

First Vice-President, Dr. J. R. Young, Anderson.

Second Vice-President, Dr. H. Crady Callison, Newberry.

Third Vice-President, Dr. R. M. Fuller, Greenwood.

Secretary-Treasurer, Dr. E. A. Hines, Seneca. Councilor Second District, Dr. Samuel E. Harmon, Columbia.

Councilor Fourth District, Dr. R. C. Bruce, Greenville.

Councilor Sixth District, Dr. C. R. May, Bennettsville.

Councilor Eighth District, Dr. J. E. Warnock. Drs. E. Marvin Dibble, of Marion, and A. Earle Boozer, of Columbia, were re-elected as members of the State Board of Medical Examiners.

Dr. J. H. Cannon, Charleston, was re-elected as a delegate to the American Medical Association; and Dr. Fred Williams, of Columbia, was elected as alternate.

Dr. F. H. McLeod, Florence moved to reelect by acclamation the entire membership of the Executive Committee of the State Board of Health, as follows: Dr. William Egleston, Hartsville; Dr. E. A. Hines, Seneca; Dr. Robert Wilson, Charleston; Dr. Davis Furman, Greenville; Dr. W. R. Wallace, Chester; Dr. L. D. Boone, Langley; Dr. F. M. Routh, Columbia.

This motion was seconded by Dr. Olin Sawyer, Georgetown, and was carried.

The House of Delegates then adjourned.

EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

ARCHIVES OF OPTHALMOLOGY

Dr. Alan C. Woods, Baltimore, Md.

Protein Therapy—specific and non-specific—in Opthalmology.

In specific protein therapy, the protein employed is one directly on indirectly related to the etiological factor casing the morbid process, it is used to evoke factors of resistance specific for the exciter of the disease. In non-specific therapy the protein employed is one in no way related to the etiological exciter of the disease, it is designed to increase the general resistance of the individual to disease and infection in general.

The history of specific therapy for the prevention and cure of disease is one of the most interesting stories in the progress of medicine. Modern specific therapy begins with the use of smallpox virus by Jenner, it progresses with the experiments of Pasteur on rabies and anthrax, the discovery of tuberculin by Koch, the discovery of diphtheria antitoxin by Roux and Behring on the developments of our own time. Early in the story we find opthalmologist attempting courageously, yet uncertainly to apply in their specialty the principle that "like cures like."

The history of the use of specific therapy in opthalmology has come down to four separate phases; first the tuberculin, secondly, the use of bacterial vaccines and derivatives, thirdly, the use of uveal pigment in sympathetic opthalmia, and fourthly, the use of lens protein in diseases of the lens.

Tuberculin therapy

It may be of interest to describe briefly the method which has been adopted in the Wilmer Institute of the Johns Hopkins Hospital.

The object of the diagostic use of tuberculin is to determine whether or not an unusual degree of tuberculin hypersensitivity exists, and at the same time to avoid a focal reaction in

the eye. The intradermal diagnostic test has been routinely adopted. Intradermal injections in the forearm are made with 0.05c. c. of different dilutions of tuberculin—1:1,000,000, 1:100,000; 1:10,000 and 1:1,000 making the intradermal dose respectively 0.00005 mgm; o.oo5mgm; and o.o5mgm. The smaller doses are first given, the larger doses only when the reactions to smaller doses are negative. The normal individual reacts to a dilution of a 1:1,000 or 0.05mgm, intradermally. A positive intradermal reaction with a 1:10,000 solution is suspicious of an active tuberculous focus in the body, while a positive reaction with 1:100,ooo or a 1:1,000,000 dilution appears to be pathognemic of an active tuberculous lesion.

The points to be emphasized in the use of tuberculin are these: I. Great care should be exercised in the diagnostic use of tuberculin to avoid focal reactions. 2. The initial dose of tuberculin should always be very small, and graduated in relationship to the degree of hypersensitivity. 3. Tuberculin therapy should be instituted only after all manifest foci of infection have been eradicated, and should not to be started until the patient has recovered from the effect of the eradication of such foci of infection. 4, After treatment has been finished, the patient should be watched for a return of the hypersensitivity.

Vaccine therapy

Vaccine therapy is of little value. The exception appears to be the treatment of furunculosis of the lids, and adnexa, and of blepharitis, with autogenous vaccines or staphylococcus aureus. Besredka showed there were two substances in the staphylococcus—one a "thermolabile virus" which is adherent to the body of the bacterium and which may produce serious skin lesions; the other is a toxic, thermostabile, and is easily detached from the body of the germ and dantagonizes the former substance. This last substance he calls the antivirus. The

application of this antivirus to the receptive cells successfully vaccinated the cells, and rendered them immune to a subsequent lethal dose of the bacteria. Carrere then studied the application of this idea to the eye. He found that the instillation of the anti-virus in the conjunctival sac twenty-four or forty-eight hours before, protected the conjunctiva, cornea and anterior chamber of the eye against what was otherwise fatal inoculation of the specific bacteria. In other words, by local application of the specific anti-virus the tissues of the eye were vaccinated and could be protected against an inoculation of bacteria, otherwise fatal to the eye.

This fact was employed in ocular therapy in blepharitis, dacryo-cystitis, conjunctivitis, and such conditions, by the application and instillation of the anti-virus specific for the bacterium causing the morbid ocular condition. These brilliant results are due to a local desensitization of the receptive cells. Besredka points out that in the reaction between a virulent bacterium and the receptive cells, a third substance is liberated, as a product of the secretion and disintegration of the bacteria. This substance repels the phagocytes— a negative chemotaxis,—allowing the bacteria to multiply. Besredka believes that the application of the antivirus has the function of accustoming the receptive cess, dulling their sensitiveness. the bacterium—or, in other words, immunizing the cell. Thus the reaction between the receptive cells and the bacterium is abolished, negative chemataxis is avoided, and normal phagecytosis takes place.

Whatever may be the theoretical explanation, the attractiveness of this therapeusis cannot be discounted, and promises a definite application in opthalmology.

Uveal Pigment therapy

In our experience a hypersensitivity to uveal pigment has commonly been found in active sympathetic opthalmia.

Not only does it seem apparent that pigment therapy is of value in the disease, but it also seems to influence very favorably the postoperative recovery in sympathetic opthalmia, when operation is necessary.

Lens Protein therapy

Much more startling than these clinical observations (many being quoted) illustrating a possible relationship between lens protein and cataract, are the brilliant experiments of Guyer and Smith. These observers, by the injection of fowl antilens serum in pregnant rabbits, and by the discussion of the lens of the pregnant rabbits, have produced cataracts in the eyes of the young.

Our very limited observations on endophthalmitis phaceanaphylactica appear to confirm the original observations of Verhof and Lemoine. A few patients have been observed who gave definitely positive skin reactions to lens protein. One of these was in a chile where a former discussion had been followed by a severe ocular reaction. The patient was desensitized before the second operation and the post-operative course was entirely uneventful.

Operations by Dr. W. H. Wilmer were preliminary iridectomy, cataract extraction four weeks later, and a discission six weeks after extraction.

The patient was at once given desensitizing courses of both lens protein and oveal pigment.

Non-specific Protein therapy

The first observation on the effect of non-specific protein therapy was that of the Indian Plague Commission many years ago, who observed that anti-plague inoculations had a benefical effect on miscellaneous infections, and drew attention to the therapeutic role which non-specific protein might play.

This reaction to non-specific protein which has been the subject of a great amount of study is characterized by the following phenomena:—chill, which follows the injection of the non-specific protein; fever, sometimes of 100-106 degrees, falling to normal within twenty-four hours; tachycardia, nervous irritability; glandular hyperactivity, accelerated nitrogen metabolism; increase, then a decrease in the permeability of the blood vessels; an increase in resistance to poisions; increase of lymph flow; leucocytosis, chiefly of the polymer phoneutrophiles, and more rarely of the eozinophiles; mobilization of the preteolytic enzymes and lipases; a decrease in the anti-

ferment content of the serum; occasionally the mobilization of the specific antibodies; and lastly the occurence of a definite reaction around the focus of inflammation.

The focal inflammatory reaction is due to a sensitivity against protein in general which is producted by a localized inflammatory focus. This focal reaction is definitely diphasic in character, characterized in the primary phase by an increase in the inflammation, in the second phase by a decrease in the inflammation, and by healing.

In general it appears that the beneficent effects of non-specific protein therapy are in the main dependent upon the stimulation of the fixed cells. Weichardt has been shown that while a small dose stimulates the cells, larger doses depress them.

There are an enormous number of substances which are capable in a greater or lesser degree, of provoking the typical non-specific reaction. Among such substances are the counter irritants, the normal and immune serums, antitoxins, proteins, egg-albumin, milk derivatives, gelatin, nucelo-proteins, neucleohexyl, protein-split products, enzymes, tissue extracts, vaccines without number, bacterial extracts, celloidal metals, yeast, etc.

In the American Clinics we find three proteins commonly used in the non-specific protein reaction. The first of these is milk or some of its derivatives. This is certainly the mildest. The reaction it produces is probably the most variable, as are likewise the therapeutic responses elicited. Evidence has been presented which indicates the reaction produced by milk is in proportion to its bacterial content. (This has been disproved).

Anti-diphtheritic serum is the second protein and appears to be the general favorite. Its

use has especially been urged in hypopyon keratitis and other conditions, and it has been recommended in sympathetic opthalmia. The reaction following its use is usually sharper than the reaction following milk.

The third protein generally employed in bacterial vaccine, usually typhoid vaccine. This may be given either subcutaneously or intravenously, preferably the latter. This protein has the advantage that the dosage may be more exactly controlled than with milk, and the response elicited prophosied with greater accuract. An average initial dose is about ten million bacteria. It should be repeated at about six day intervals and each dose increased from two to five million bacteria, according to the results desired, and already elicited.

The reaction is diphasic, the first phase being characterized by the rather violent general symptoms and by an increase in the local inflammation, and the second phase characterized by the definite beneficent efforts and the resolutions the inflammatory process.

In the case of a debilitated patient, or when a mild reaction is desired, milk seems to be the protein choice. In the event of a more certain reaction is desired, anti-diphtheritic serum may well be used, after preliminary tests are made to determine the question of hypersensitivity. (If the local disease is advanced to considerable degree, a much sharper stimulus will probably be needed to evoke a response from a cell, fatigued by disease). If the patient is a good clincal risk, killed bacilli may be used intravenously.

Our choice of protein and dosage should be governed by the reaction we desire to produce, and this should be controlled by the condition of the inflammatory lesion and the general condition of the patient.

BOOK REVIEWS

THE COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION FOR 1927—Volume XIX. Edited by Mrs. M. H. Mellish and H. Burton Logie, M. D. Octave volume of 1330 pages with 412 illustrations. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$13.00 Net.

CLINICAL MEDICINE—By Oscar W. Bethea, M. D., Ph. G., Professor of Therapeutics, Tulane Graduate School of Medicine; Professor of Clinical Therapeutics, Tulane School of Medicine, New Orleans, La. Octave volume of 700 pages. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$7.50 Net.

SYPHILIS—A Treatise on Etiology, Symptomatology, Diagnosis, Prognosis, Prophylaxis and Treatment—By Henry H. Hazen, A. M., M. D. Professor of Dermatology and Syphilology, Medical Department of Georgetown University; Professor of Dermatology and Syphilology, Medical Department of Howard University; Member of American Dermatological Association; Visiting Dermatologist and Syphilologist to Georgetown University Hospital, Freedman's Hospital; Author of "Diseases of the Skin," "Cancer of the Skin," etc. Second Edition. With 165 illustrations, including 16 Figures in Colors. St. Louis: The C. V. Mosby Company, 1928.

MODERN METHODS OF TREATMENT—By Logan Clendening, M. D. Associate Professor of Medicine, Lecturer of Therapeutics, Medical Department of the University of Kansas; Attending Physician, Kansas City General Hospital; Physician to St. Luke's Hospital, Kansas City, Missouri. With chapters on special subjects by H. C. Anderson, M. D.; J. B. Cowherd, M. D.; H. P. Kuhn, M. D.; Carl O. Rickter, M. G.; F. C. Neff, M. D.; E. H. Skinner, M. D. and E. R. DeWeese, M. D. Second Edition. St. Louis: The C. V. Mosby Company, 1928.

MEDICAL CLINICS OF NORTH AMERICA—
(Mayo Clinic Number—May, 1928). The Medical Clinics of North America (Issued serially, one number every other month.) Volume 11, Number 6, (Mayo Clinic Number, May, 1928). Octavo of 330 pages with 89 illustrations and complete Index to Volume 11. Per Clinic year, July, 1927 to May, 1928. Paper, \$12.00; Cloth,

\$16.00 net. Philadelphia and London: W. B. Saunders Company.

OPERATIVE SURGERY-By J. Shelton Horsley, M. D., F. A. C. S., Attending Surgeon, St. Elizabeth's Hospital, Richmond, Va. With 756 original illustrations. Illustrated by Miss Helen Lorraine. Third Edition. St. Louis: The C. V. Mosby Company, 1928. This textbook is rapidly becoming one of the most popular books on surgery in the medical schools of the country and is an invaluable guide to the practitioner of medicine and surgery. The author's sound position as outlined in the preface to the first edition in 1921 that particular stress has been laid upon the preservation of physiologic function and the interpretation of the biologic processes that follow surgical operations has had much to do with the success of the work. The book was revised in 1924 and again in 1928. The illustrations are numerous to the number of seven hundred and fifty-six in a volume of eight hundred and ninety-three pages. They are all clear cut and instructive. While many of the surgical procedures bear the stamp of original research by the author and his assistants good authorities in all parts of the world have been freely quoted. Many of these in the South. We note for instance on page 652 reference to the work of Dr. LeGrand Guerry of Columbia in connection with surgery of the bile tracts. We heartily commend the book for its many evidences of original investigations and for the presentation of the ripe experience of its disguished author.

A HANDBOOK OF CLINICAL GYNECOLOGY AND OBSTETRICS-By Rae Thornton La Vake, A. B., M. D., F. A. C. S. Assistant Professor of Obstetrics and Gynecology, University of Minnesota, Clinician in charge of the Obstetric and Gynecology Department of the University of Minnesota Dispensary. Associate Attending Obstetrician and Gynecologist to the Minneapolis General Hospital. Obstetrician to the Northwestern and Abbott Hospitals, Minneapolis. Illustrated. St. Louis: The C. V. Mosby Company, 1928. This is a compact manual dealing with the everyday practice of the busy doctor and written from the viewpoint of competent advice as to the latest methods of handling these cases.

THE MENACE OF PELLAGRA

Editor Journal S. C. M. A.:

Pellagra has become a serious menace thruout this section. Since the early days of April 1 have treated 59 cases of this disease, which is about three or four times as many as 1 usually see in one season. 1 presume this is about the experience of other physicians over this part of the State.

I have become firmly convinced that the disease is contagious and that our efforts should be directed towards prophylaxis; the use of antiseptic washes, and as much as possible restricting the infected individual to his own washing and eating utensils and bed.

When I began the practice of medicine forty years ago and for many years thereafter pellagra was unheard of and conditions then were much worse than they are now. The poorer classes, and pellagra is by no mean confined to them, are much better housed clothed and fed today than they were thirty or forty years ago. The disease was probably introduced into this country by immigrants from Southern Europe.

It is not uncommon to see two or more victims in one household. In one instance that has come to my knowledge the father, mother and four children in the entire family have pellagra. People living in neighboring houses and under exactly similar economic conditions have not developed the disease.

Faulty diet may favor the development of the disease but it does not cause it. Uncleanliness favors the development of typhoid and dysentery but no well informed person today believes that these diseases are caused by uncleanliness.

Pellagra may be prevented and cured by brewyer's yeast (sic). Malaria is cured and prevented by quinine but no well informed and sane person today would adopt a daily diet of quinine to the exclusion of other obvious means of prevention of malarial infection now in our hands.

R. B. Furman, M. D.

Sumter, S. C.



:- NEWS ITEMS

Dr. Lee Milford, Surgeon at Clemson College, invited a large number of physicians to assist him in making the physical examinations of the Freshman Class at the opening session of Clemson College recently. President D. L. Smith at the Columbia meeting called the attention of the Association in his address to the House of Delegates to the remarkable efficiency of the Medical Department at Clemson.

As the Journal goes to press newspaper reports indicate that the Alumni and friends of the Medical College of the State of South Carolina have subscribed one hundred and fifty thousand dollars toward the campaign to double the capacity of the institution. The campaign will be pushd to an early completion.

Dr. J. S. Rhame of Charleston, Editor of the Department of Surgery in the Journal has returned from a visit to the Mayo Clinics.

Dr. W. S. Thayer, President of the American Medical Association, has been invited to deliver an address before the State Medical Association at Charleston in 1929.

Colonel F. L. Munson will open an Infantry Branch School for Reserve Officers at Clemson College, October 1, 8 p. m. Medical Reserve Officers in the vicinity of Clemson will be eligible to attend. Other schools will be conducted in various parts of the State during the fall and winter and it is urged that Medical Reserve Officers get in touch with the one nearest to them in order that advantage may be taken of this opportunity to add to their credits for promotion.

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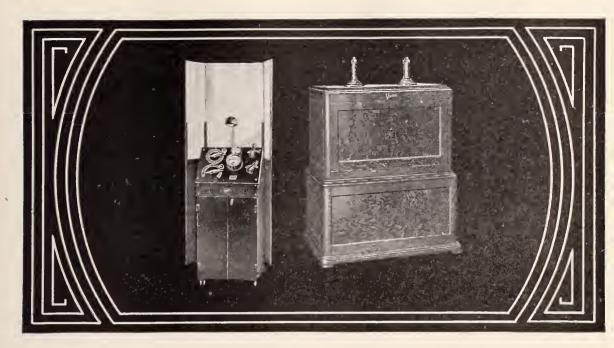
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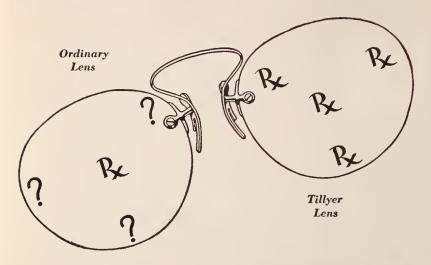
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The Journa of the

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EDITORIAL

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THE MENACE OF HEART DISEASE

Elsewhere in this issue Dr. J. H. Cannon, Associate Professor of Medicine, at the Medical College of the State of South Carolina, calls attention to the most acute problem before the medical profession today. When it is considered that heart disease has taken its place in the front rank of damaging and fatal maladies it is high time extraordinary measures should be adopted at once to meet the situation. The American Heart Association has had a phenominal growth in certain sections of the country and this organization endeavors to further the study and prevention of Heart Disease throughout the country. A few earnest clinicians in South Carolina have been giving serious thought to the question of organizing the profession and the public to join in this national movement. It is particularly incumbent upon general practitioners, internists, and pediatricians, to interest themselves in the promotion of plans for organizing our State as has been noted in the article alluded to. Tuberculosis has fallen from first to sixth place as the chief cause of death by virtue of organized effort throughout the world by both the doctor and the layman.

Some very creditable work has been done recently in the Department of Internal Medicine of the Medical College of the State of South Carolina on the various phases of heart disease. Very valuable statistics so far as South Carolina is concerned are being complied there.

The Vital Statistics Bureau of the State Board of Health at Columbia records an ever increasing list of deaths from the various types of heart disease.

Papers by eminent men are being read with increasing frequency before our constituent medical societies on this subject. One of singular interest was present by Dr. Stewart R.

Roberts of Atlanta, Georgia, before the Third District Medical Society at Greenwood, October 4. We must conclude from recent observations of the trend of medical thought in our State that the time is ripe as suggested by Dr. Cannon for a close up concentration of ideas on the best way to go about crystalizing the various suggestions hitherto made. The Journal invites discussion of the subject and letters embodying concrete suggestions as to how we shall proceed.

SOUTH CAROLINA DOCTORS IN WHO'S WHO IN AMERICA

Volume 15, 1928-1929, is just off the press publishing the outstanding achievements of twenty-eight thousand, eight hundred and five, living men and women of the United States with an estimated population of one hundred and twenty millions of people. Of this number three hundred and twenty-four were born in South Carolina and two hundred and three live here now, the others residing in various parts of the world. There are thirteen hundred and nine physicians in South Carolina and of this number eleven have been accorded recognition as follows:

Edward F. Parker, M. D., Charleston, S. C. W. F. R. Phillips, M. D., Charleston, S. C. Robert Wilson, M. D., Charleston, S. C. Allard Memminger, M. D., Charleston, S. C. (retired).

Le Grand Guerry, M. D., Columbia, S. C. James A. Hayne, M. D., Columbia, S. C. F. H. McLeod M. D., Florence, S. C. J. W. Jervey, M. D., Greenville, S. C. E. A. Hines, M. D., Seneca, S. C. B. B. Steedly, M. D., Chick Springs, S. C. James D. Nisbet, M. D., Van Wyck, S. C., (retired).

It is interesting to note that the majority of these physicians were born in the country or in the small town. The majority of them also are about sixty years old or older. All of them are in the full vigor of active service with two exceptions. Only one according to the record obtained a Bachelor's degree prior to the study of medicine. All attended college. It is significant, however, that sixty four out of

every one hundred of the twenty-eight thousand eight hundred and five persons included in the book were college graduates. Perhaps medical men average up well in this regard. It is very probable that no other vocation shows up quite so well at the present time.

The current volume includes only the living but the previous fourteen volumes may be referred to for the names of deceased physicians and others who were accorded recognition in other years. The publishers of Who's Who in America state clearly that they have not given place necessarily to the best people but to the best known in their several lines of endeavor. The new book is attractively bound and is considered to be the highest authority available in this country and is an invaluable book for the public press, public libraries, schools and colleges.

TOXIN-ANTITOXIN CAMPAIGN IN ANDERSON COUNTY

Elsewhere in this issue is a resume of the work being carried on by the medical profession and the County Health Unit of Anderson to eradicate diphtheria. The comments made by Dr. Epting, the efficient Health Officer, are timely and should prove helpful to the members of the profession who are constantly being asked by the lay public the details of such a campaign. There is much uncertainty in the minds of the public as to the efficacy of these preventive measures and the dangers supposed to be inherent in them. Medical men can refer to this article in confidence when speaking to their health clients about these proceedures. There is a wide spread belief amongst the laity that if a child has been given toxin antitoxin and subsequently contracts diphtheria that the giving of antitoxin may produce serious anaphylactic symptoms or even prove fatal. The author given in his paper ample authority to contrary. We wish to stress the fact that the medical profession in Anderson County is heartily supporting the campaign and therefore it is bound to be a success. We have noted with approval that there is a more cordial feeling existing between Health Departments

generally and the organized profession. This is due to a better understanding as a result of closer contact with each other and to the tactful handling of problems that are mutually interdependent. Then too, the younger medical men coming from Class A medical schools have had better training in public health

measures than the older graduates had. At our own State school in Charleston the State Health Officer lectures throughout the year as a Professor of Public Health. We congratulate the Anderson County Health Department on the admirable showing made.

ORIGINAL ARTICLES

ARTERIAL ANASTOMOSIS*

James McLeod, M. D., Florence, S. C.

There can be no more dramatic incident in the life of a surgeon than the opportunity for doing an arterial suture, and while this paper is little more than a case report, yet I hope that it will serve the purpose of emphasizing the fact that the procedure is of practical application and of the utmost importance. In injury to large vessels where ligation would probably mean amputation, it is definitely the method of choice, and presents but little difficulty in its technic.

Collateral circulation is a wonderful phenomena and the work of Horsley has proven that in animal experimentation that adequate collateral circulation may occur even after the occlusion of the abdominal aorta, provided the constriction only partially occludes the lumen of the vessel—complete thrombus gradually taking place. Following the ligation of a large vascular trunk adequate collateral circulation slowly establishes itself, taking from fifteen to twenty-one days, in animal experimentation. depending upon the vessel ligated and the site of ligation. The complete ligation of a large vessel may throw too great a strain upon the compensatory circulation and gangrene may take place.

In a case recently reported by Lipshutz of Philadelphia, this fact is beautifully demonstrated. His patient, a young woman of twenty, had a stab wound of the left external iliac artery. She was seen about thirty minutes after the accident and was in extreme

shock. On exploration of the wound the external iliac artery about one cm. below its origin from the common was incised for about half of its circumference. The wound in the artery was sutured and at the completion of the procedure there was good pulsation in the vessel below the site of injury. However, forty-eight hours after operation definite signs of gangrene appeared on the dorsum of the foot, and within four days a line of demarcation was present. Amputation was performed six days after the occurrence of the injury about 5 cm. above the line of demarcation. The tissues were anemic, pale gray and did not bleed. Fifteen days later a revision of the amputation stump was carried out and at that time the tissues bled freely and the muscles were red and full of life. The collateral circulation had at that time become definitely established.

The cause of gangrene in this case was probably the result of thrombus formation. The thrombus, however, was probably not primarily complete and the incomplete occlusion of the vessel was an important factor in maintaining direct circulation during the establishment of the collateral circulation, and Lipshutz, by his highly skillful procedure, was able to save most of his patient's limb. He probably would have lost more of it if he had done a primary ligation.

Thrombus formation is in direct proportion to the trauma to the vessel, and in a large measure directly proportionate to the amount of thrombokinase liberated, the essential substance in the clotting of blood. It is supposed to be present in all the tissues of the body, particularly the blood platelets, and also comes

^{*}Read before the South Carolina Medical Association, Columbia, S. C., April 18, 1928.

from disorganized blood corpuscles. It is liberated from injured cells and as the amount of clotting is proportionate to the injury, it plays an important role in blood vessel surgery, and any technic which causes undue injury to the vessel or drying of the endothelial cells will necessarily produce an excessive liberation of thrombokinase, and perhaps the most *essential* factor in blood vessel suture is such technic as will do least trauma to the vessel. If the surgeon is able to anastomose a vessel, leaving a smooth everted uninjured endothelium lining the lumen of the vessel, the chances for success are quite good.

The technic as advised by Horsley meets these requirements, I believe, better than any other. The open ends of the vessel to be sutured are freshened, and gently stripped back between the thumb and index finger, for about one inch where the vessel is grasped with a bull dog forceps. If this forceps is not available the upper end may be held between the thumb and index finger of the assistant, or held with a Kelly clamp, using only enough pressure on the clamp to occlude the vessel, without locking the clamp. With the open ends of the vessel adjacent to each other, and with moist gauze beneath the vessel the stitches are ready to be placed. The technic has for its object the eversion of the intima and to facilitate this procedure three guy sutures are inserted at equal distances around the vessel, each stitch passing from without inward on one end and from within outward on the other. Care must be taken to prevent drying of the vessel ends. Olive Oil may be dropped on them for this purpose, as advocated by Horsley. I have not employed it, but have gently released the upper clamp about every two minutes during the suture and allowed the escape of a very small quantity of blood. This flows on the gauze beneath the suture field, which is then changed. Normal saline is also used to bathe the parts. With the three guy sutures in place the suturing is then begun in the form of a double mattress, going from one guy suture to the other. Horsley has devised an arterial suture staff which facilitates the proper eversion of the stitch. The method as advocated by Carrell where a continuous overhand stitch is used must be satisfactory, but I believe there is more opportunity for thrombus formation because these is more of the suture in the lumen, and the intima is not as completely everted.

The only available suture material at hand when my cases occurred was a silk, which was used satisfactorily. I believe, that I would prefer 100 or 150 spool cotton, which is much smaller, and has adequate tensile strength, and incidentally, we, in our clinic, value cotton as one of the *most satisfactory* sutures in general surgery.

The following three cases are reported: Case one was done by Dr. F. H. McLeod, who has kindly permitted me to include it in this report. All three cases were done at The McLeod Infirmary.

CASE 1. Man, farmer, aged 40. He was shot by a 32 pistol two hours before admission, the ball passing the anterior surface of the right arm, two inches above the elbow. There was great swelling below the site of entrance and likewise in the antecubital space. The forearm was cold and clammy and no pulse could be elicited in either radial or ulnar arteries. Exploration of the wound was immediately done, using a general anesthetic. There was an extensive hematoma under the skin. The brachial artery was found severed completely two inches above its bifurcation. The rough end of the artery was freshened and an end to end anastomosis performed. There was no leakage at the conclusion of the procedure, and the vessel pulsated well below the suture. The wound was closed without drainage. The radial pulse was good six hours after operation, and continued so during his stay in the hospital. The wound healed by primary union. He has been actively engaged in farming since and without noticeable evidences of his injury.

CASE 2. Man, age 30, cotton gin attendant. Two hours before admission his left arm was caught in a gin saw and he sustained a laceration on the medial aspect of the arm at the midpoint. The cut extended practically half way around his arm, down to the humerus, which was roughened slightly. There was immediately a terrific hemorrhage and a tourniquet was applied by a fellow workman. He was attended in a few minutes by his family

physician. The tourniquet was released and the hemorrhage began again. The bleeding points were caught and ligatures applied around them. On admission to The Infirmary he had no tourniquet on and the wound was not bleeding. The wound was immediately explored under a general anesthetic. The brachial artery was found completely severed at the junction of the middle and upper one third. The superior profunda was likewise demonstrated and it was severed. There was no evidence of any circulation in the arm below the laceration. A ligature was found around each vessel. The median nerve was also severed. The edges of the brachial artery were freshened, and an end to end anastomosis performed. At the completion of the procedure there was no leakage. There was an immediate pulsation in the vessel below the suture line. The superior profunda was ligated and an end to end suture of the median nerve was done. The wound was debrided and closed with a small rubber band drain at one angle which remained for forty-eight hours. Six hours after operation there was a detectable pulsation in his radial artery, which remained good. He was discharged in two weeks, his wound having healed by primary union. The sensation in his hand from his median nerve injury has been improving steadily and he has been working as before the accident. The circulation now is the same in this arm as in the other. This case was done in October, 1927.

CASE 3. This case I believe to be unusual and to me is most interesting. A young boy, age 12, admitted December 1st, 1927. He had been feeling bad for several days before admission, complaining of generalized abdominal pain, which settled in the right lower quadrant of his abdomen two days before his admission. He had also been nauseated and vomited several times. On admission his temperature was 101 degrees and pulse 120. On physical examination a tender mass was found in his right lower quadrant about the size of a lemon. A tentative diagnosis of appendicular abscess was made. At operation a McBurney's incision was made, and the internal oblique and transversalis incised in the same direction as the external oblique. The mass was found to be entirely extra peritoneal and completely en-

veloping the external iliac artery. A Kelly clamp was introduced into it and it exuded pus. The mass was very friable. Using the index finger as a blunt dissecter it was gently removed. The suppuration had apparently extended into the outer two layers of the vessel, and shortly after its removal there was a terrific hemorrhage. The external iliac had ruptured at the site of the removal of the growth. The growth was unquestionably a mass of lymph nodes which had become necrotic. I clamped the upper end of the vessel and resected about one half inch of this, removing one fourth inch on either end, where the vessel was fragmented and apparently necrotic An end to end anastomosis was then performed, at a point one inch below the bifurcation of the common iliac. At the completion of the suture there was no leakage, and the vessel pulsated below. The wound was iodined and closed with interrupted sutures without drain. At the end of twenty-four hours there was detectable pulsation in the posterior tibial artery and the femoral artery as felt in Scarpa's triangle was pulsating strongly. The wound healed by primary union. The patient was kept in The Infirmary four weeks and his circulation in this leg was always equal to that of the other. He was last seen on April 1st. 1028, which was four months from the date of his operation. The circulation in both limbs still appeared the same. On the side of the anastomosis the femoral artery could be felt pulsating strongly and likewise the posterior tibial. The temperature of both limbs was the same, and there was no swelling. His systolic popliteal blood pressure on the affected side was 90, contrasted to 105 on the other. He was going to school and his general health excellent

A communication from the American College of Surgeons on February 28th, 1928 stated that they could find no record of a reported successful suture of the external iliac artery. There is no claim whatsoever on my part that this is the first case.

In conclusion I would like to state that arterial suture is not a difficult procedure, and the technic should be familiar to all doing surgery, for in cases where it is indicated it offers the best possible result, and no surgeon can

tell when such an emergency—such an opportunity will arise.

THE EARLY DIAGNOSIS OF PULMON-ARY TUBERCULOSIS*

By Ernest Cooper, M. D., State Park, S. C.

The responsibility for the early diagnosis of tuberculosis rests chiefly upon the patient and his physician. The patient will not visit the physician promptly unless he knows the early indications of tuberculosis, and the latter will not make a diagnosis, if he does not have sufficient knowledge of the disease and its manifestations to outline a clinical picture of beginning tuberculosis.

There should be wide-spread information upon how tuberculosis makes its insidious attack. The layman should know that tuberculosis is felt by its victim long before its presence is portrayed in his features, voice and physique. Potts says the patient *feels* tuberculosis months or years before he *looks* like a consumptive.

What then are the chief changes the layman should recognize as possibly indicating tuber-culosis? One of the earliest manifestations is weakness, lack of endurance, loss of energy. The tuberculous in performing their daily duties notice that fatigue comes early—their zest for work is lessened, their "pep" is lost before the task is done. Easy fatiguability, then may be an early subjective symptom.

A second and important change *felt* relates to the nervous system and the emotions. Formerly of a quiet, placid temperament, the patient becomes irritable, easily provoked and gives way to his emotions. Tuberculous women cry easily, are often inconsiderate and petulant. Many times the condition is called neurasthenia or a nervous break-down. Peevishness, petulancy or fretfulness—indicative of a change in disposition, may be an early subjective symptom.

A third and very common change relates to the digestive tract. Usually a lack of appetite is present. Certain foods become distasteful of are thought to disagree and are stopped.

*Read before the South Carolina Medical Association, Columbia, S. C., April 19, 1928.

The patient is thought to have "stomach trouble." With digestive disturbances, lack of appetite and the elimination of certain foods there follows loss of weight. Disturbance of appetite and digestion, then, may be another change observed by the patient.

Nearly all tuberculous patients experience painful sensations in the chest. Usually they are referred to the chest wall, are independent of a frank pleurisy and seem related or due to toxemia. Often the area or spot can be located by touch. At other times the pain may be referred to the shoulder and arm. It is then called rheumatism, neuritis or neuralgia. Pain or soreness in the chest, then, is a fourth change observed by the patient.

If the general public can be taught the significance of these changes felt in the early stages of tuberculosis and thereby prompted to report to competent physicians for examination great progress will be made in the early detection of the disease. Once the patient has visited the doctor, he is entitled to a thorough and painstaking examination, including a record of his past history and present illness.

One should learn from the past history whether the patient is a "contact"; the relation of measles, whooping-cough, influenza, pneumonia and repeated colds to the present illness. Opie states that in families of which a member has sputum positive for tubercle bacilli, children and adults are usually infected with tuberculosis; when sputum is negative for tubercle bacilli, tuberculous infections are far less prevalent and severe. Much emphasis should be placed upon symptoms and signs; those which the patient feels and others — notably — hemorrhage, pleurisy, hoarseness, cough, sputum. Regarding hemorrhage Minor says "a physician who fails to realize the significance of hemorrhage is playing with life." When blood is coughed up it should be considered a sign of tuberculosis until proved due to other causes. Pleurisy with effusion should always arouse suspicion. Pleurisy may be an acute agonizing pain, but often 'tis dull-aching in character. Homan considers that 90 per cent of pleurisies are tuberculous. Hoarseness is an early symptom of a few patients, due possibly to fatigue of the throat muscles or to stimulation of the larvngeal

nerves. Coughing and spitting are associated with many respiratory ailments and when persistent for a month or more should be carefully investigated, as they occur in tuberculosis characterized by a catarrhal onset. Regarding the temperature, Sewall says—"When there is a periodic afternoon rise in mouth temperature of one-half degree, increased by exercise, the evidence for tuberculous infection is strengthened; subnormal temperature points in the same direction if to a different phase."

The physical examination should be made without delay with the chest bare or draped. Chapman has recently cited 179 cases that seemed to warrant an immediate chest examination; 81 per cent received it within a few weeks, 12 per cent were not examined for two months to eight years, 3 per cent never received a chest examination, and four men were examined through their clothing.

The examining room should be comfortably warm; the light must strike the chest at right angles. Insection may reveal slight flattening of the shoulder line, a little atrophy and thinning of the supra—and infraclavicular tissues. thus giving prominence to the clavicle. Slight lagging or lessening of respiratory movement may be noted upon the affected side. Palpation is not very helpful in early cases except to discover tension or flaccidity of tissues—the Pottenger Sign. Percussion skilfully done may reveal impairment of the note in the apical regions, both front and back. Outlining Kronig's isthmus will show retraction, and marking the limits of the bases before and after deep inspiration will reveal diminished excursion on the involved side. Auscultation is the most important of the procedures in chest examination. The most valuable findings are increased whispered voice sounds, and moderately coarse rales persisting after cough. Minor says that distinctly dry, sharp rales, few in number, heard at the end of cough following expiration and limited to a small area and persistent, are our most important diagnostic sign, but a diagnosis must often be made from the inspection and breath sounds before rales appear. For active disease may exist without rales: and rales may be present, without activity. Heise has recently stated that only 49 per cent of minimal cases admitted to Trudeau sanatorium from 1915 to 1921 had rales, and that only 29 per cent of minimal cases admitted from 1921 to 1925 had rales. Attention must be given to the pitch, quality and duration of breath sounds—comparing corresponding areas of the two sides. Any changes must be over a limited area, persistent or recurrent.

Since about two-thirds of early cases do not have tubercle bacilli in sputum, their absence does not militate against a positive diagnosis. The finding of tubercle bacilli alone makes the diagnosis. Opie has shown that sputum negative to repeated microscopic examinations is frequently found positive by animal inoculation.

Tuberculin is helpful in diagnosis. The intradermal method of Mantoux is preferred. When it is repeatedly negative, tuberulosis is improbable.

The X-Ray is an invaluable help in early diagnosis, when stereoscopic films are used. The pictures should be made and interpreted by one especially trained for the work.

SOME PROBLEMS OF PRENATAL CARE*

Oren Moore, M. D., Charlotte, N. C.

In my opinion there is no other one branch of medicine which is so important as this subject of prenatal care. We can group the problems roughly like this. A woman who is pregnant can have any disease any other woman can have, plus the complication of pregrancy. Secondly, there is a type of pathology which is peculiar to pregnant women. You have all varieties of problems to meet when you are practicing prenatal care or practicing obstetrics. There is an economic problem, the problem of the working mother. That touches every other problem. Women are touching every business, every industry, every profession. The minute they enter work they entangle the relationship of mother with that job. So we have a big economic problem and a big social problem in prenatal care. There is the problem of the woman afflicted with venereal disease. Then we have the sociological problem of the unmarried mother. We have

^{*}Read before the South Carolina Medical Association, Columbia, S. C., April 19, 1928.

all types of problems in the way of diseases themselves. For instance, we may have anemia, which, the minute a woman becomes pregnant, tremendously complicates pregnancy. So we have all types of problems. I can not, of course, take up all of them; I shall not touch the purely ethical ones, such as when and how to interrupt pregnancy, which I think is one of the greatest strains a man can undergo. To determine whether to take the life of an unborn baby and determine just how far the mother can go and recover is a very difficult thing.

You understand that I am not solving all these prenatal problems I am bringing up today but only discussing them. From the beginning of time prenatal problems have existed, if they have not been discussed. They have been attacked by some of the most brilliant brains.

I shall begin with toxemias, because I was asked to include that subject. A great many men have asked me what is to be done or what we know to do about the toxemia of thyroid complicating pregnancy. If a pregnant woman has a real toxic goiter you have a real problem on your hands. The situation is full of difficulties and fraught with all sorts of hazards to the mother, whatever steps you take. Of course, it is known that the thyroid begins to get active as soon as a woman becomes pregnant; but that is the physiological type of activity, which should disappear after the first three months. If it persists longer than that the patient passes from the realm of physiology into the realm of pathology and must have the very closest and most careful attention if we hope to bring her through. It is almost as hard on the mother to interrupt a pregnancy as to let her go through. It is, of course, perfectly possible to do a goiter operation during pregnancy, but there are often tremendous bad effects. Whatever you do has to be done with a lot of care and a lot of thought.

The adolescent type of goiter or puberty type, which often persists in a young mother—a girl who has had one at fifteen or sixteen and married a few years later—will often disappear during the second or third pregnancy. It would be a brave man, however, who would suggest to a patient of this type that she become pregnant in order to relieve the goiter,

because often the opposite occurs. Personally, it is very difficult for me to distinguish between types of goiter. Unless you have distinguished between them you could not well tell the patient to go ahead and get pregnant in order to relieve the goiter. If we use Lugol's solution often by the fifth or sixth month of pregnancy the goiter will have subsided; the trouble is that we do not know whether in the future this goiter will return.

The x-ray treatment of goiter will often help these patients, but when they come to delivery we find the kidney was broken down and that it will not stand the strain. Very often they will be transformed from a hyperactive goiter case to a kidney toxemia. So when you have a goiter case it is like what one of the instrument men out there said: "Whenever I tell a lie I have to go around every day and see how it is getting along." I always feel like going every day to see how a goiter case is getting along.

The next thing is eclampsia. There are, of course, many different methods of treating it. So far as I am now informed and so far as I can get authoritative data from the big obstetrical clinics in America and Europe, the so-called Dublin Rotunda method or conservative method is bringing the best results. They have cut down their death rate, their mortality in mothers especially, to less than half what it was in the other methods. The so-called Dublin Rotunda method is not a new method. You give them morphia by mouth, use bleeding, and wait for a favorable time for delivery. The delivery is not done until the patient is in condition to stand that delivery. A great many of them will go home and come back for delivery; a certain percentage of them will deliver themselves of a dead baby, in which case you have done yourself no harm. Under the old methods of forcible delivery the baby was often dead or badly mutilated.

Now, the problem of selection of methods for interrupting pregnancy is a very serious one. When a patient comes with some sort of condition which demands interruption, with tuberculosis still active, etc., you have to study the methods you have to use. When patients come with other peculiar and unusual conditions so that you have to interrupt pregnancy

before a certain date, then you have to study it. You can not use the same method for all cases. Some men say they always use a Barnes' bag or a Voorhees' bag or pack the vagina tightly with gauze or use DeLee's method of doing a low cervical cesarean section. The bad result of such a fixed method can of course be easily understood. When we find a man who does only one operative procedure for his forced deliveries he requires all his patients to come up to the standard he has mentally set. But they will not come up to the standard. Women are just as variable in their reactions to operative procedures as in other respects, and they are notably capricious. As to the choice of methods I can say this; if the patient has reached the point where a loss of blood is going to be of tremendous importance, where the loss of a few ounces of blood will be of tremendous importance, then the type of operation should be one where you can controll the loss of blood. If it has to be a quick procedure, I think an abdominal hysterectomy is the best; if she can stand a slow procedure, then some of the slower methods. You have to study the individual patient and the stage of pregnancy and the condition for which you are delivering before you select your method. I do think that the splitting of the cervix in three ways is a good thing; you can get out most babies of three or three and a half months. It does not necessitate resection of the bladder.

One of the great problems that comes to men in all centers is the problem of handling unmarried mothers, how to take care of them. I have not been able to work out any plan. Occasionally I have taken the babies from the mothers and put them in some hospital or institution and guaranteed that someone will take the baby through the junior league or some organization like that. Immediately 1 do that I get a great flock of women from everywhere; there seems to be some underground current by which the information is spread. They come from everywhere, and sometimes the same women get pregnant and come back. Then 1 get a revulsion of feeling and do not touch any of them. At present I am in one of those revulsions; I

have six babies up there now and can not get anyone to take them.

Then there is the problem of preventing further pregnancies. Undoubtedly some families are too large and some not large enough. You have to consider not whether to interrupt this pregnancy but whether the woman should have another. If you feel that the woman ought not to have another baby, then recommend that she come back to you the next time she becomes pregnant and tell her you will interrupt the pregnancy, and you yourself go through the mental agony and strain.

The branch of medicine that we are talking of today and the department of medicine that we are trying to discuss offers opportunities for men to make many, many failures and also opportunities for many brilliant successes. When you have brought a baby that there was a good chance of losing and brought the mother safely through and hand the baby over to those receptive, loving arms, then you become the hero. On the other hand, a feeling grows up that every woman can have a baby, that it is a perfectly normal process. As far back às 1700, Sir James Y. Simpson, said that gestation is a perfectly normal thing but that the phenomena which have come to attend it are not

TOXIN-ANTOXIN

By E. E. Epting, M. D., Director Anderson County Health Unit, Anderson, S. C.

Prior to 1895, diphtheria stood as the most fatal disease of childhood, from 40 to 60 percent would die if they contracted the disease. Medical science had not perfected a cure. It was not until 1890 that the discovery of diphtheria antioxin was made by Behring and Kitasto. By 1895, diphtheria antitoxin was in general use by the medical practice and since that time the mortality has been reduced about two-thirds, leaving a death rate of about ten percent. However, this reduction does not relieve us of the dread disease, merely reducing the number of deaths, leaving the child who does recover impaired physically.

In 1913 the first attempts to immunize hu-

man beings to toxin-antitoxin mixture were made by Behring of Berlin. The same year Park and Zingher of New York began the immunization of children in a large organized way through the injection of toxin-antitoxin mixture, and its use in many localities has since conclusively demonstrated the effectiveness and harmlessness of this measure. The favorable results have been confirmed in many places in this country and abroad.

Eighty-three percent of the deaths from diphtheria occur in children under six years of age. Last year we reported nine deaths from diphtheria in Anderson County alone. We should take into consideration that these deaths were all of children and probably all might have been prevented by the timely use of toxin-antitoxin mixture.

The importance of protecting the preschool child can not be over emphasized. It has been stated by Dr. Park that the immunization of one preschool child is equivalent in comparison to the immunization of five children of school age. The reason for this statement is based on the fact that the high death rate from diphtheria is found in the preschool age.

It takes from five to twelve weeks to develop active immunity by the use of toxin-antixoin. Many hundreds of tests have demonstrated that from one injection we may expect 70 percent to be rendered immune, two injections will change about 80 percent and three about oo percent. If a second series of injections is given, about 80 percent of the refractory cases will respond. We try to give three when possible but often have to be satisfied with two or even one. Diphtheria antitoxin gives immediate and absolute immunity for a period of about ten days; toxin-antitoxin stimulates immunity after a lapse of from one to three months and this lasts for a long period. From tests made by Dr. Zingher and Dr. Shroeder this immunity lasts for a period of at least ten years or longer.

In over one million injections of toxin-antitoxin by Drs. Park and Zingher of the New York Department of Health, no permanent harm-to any child has ever resulted.* No annoyance beyond the soreness and moderate constitutional disturbance which develops in

some subjects and lasts from two to four days has been observed. They also state that from observation there is no increase in anaphylatic symptoms in those children who have previously received toxin-antitoxin and later have been treated with antitoxin. Anaphylactic symptoms is the reason held out by some that toxin-antitoxin should not be given during an epidemic of diphtheria. From Dr. Park's observation there is no reason under any condition to withhold toxin-antitoxin as an immunizing agent.

During the past ten years, however, three accidents have followed the administration of toxin-antitoxin or of supposed toxin-antitoxin. The first instance occurred in Dallas where. through a mix up of two preparations a toxinantitoxin mixture was used which had not been sufficiently neturalized. Several deaths occurred. Regulations were then made which will absolutely prevent this accident recurring. The second accident, which had less serious consequences, occurred in Boston. The contents of a number of vials of a special preparation used there were solidly frozen. 1mmediately after thawing the toxin-antitoxin was injected into a number of children. The children who received it had both local and constitutional symptoms; all, however, recovered. Some of this material when tested was later found to contain free toxin. It is interesting to know that the new toxin-antitoxin, which we call the one-tenth L plus toxin-antitoxin is not made harmful by freezing. accident happened in Vienna, which was at first stated to be due to the toxin-antitoxin having become toxic after it had been tested. This is an impossibility. It was discovered after an official investigation that a number of vials of diluted toxin had been sent out with the toxin-antitoxin vials, and that some of these had been used by mistake for toxin-antitoxin: therefore it was these vials of toxin that caused the trouble. Beyond these accidents there is no death known to have occurred following the injection of toxin-antitoxin.

Dr. Sophie Spicer in the Journal of the American Medical Association gives the results of a study made on a series of 237 patients suffering from diphtheria and scarlet fever who received anti-toxin at the Willard Parker

Hospital in New York. The conclusion to which Dr. Spicer comes is "previous administration of toxin-antitoxin appears to have little or no effect in subsequent serum treatment."

It should be said that one reason for the comparatively mild type of serum reaction observed was the giving of the antitoxin in small divided doses to patients who on test reacted to horse serum sensitivity. Clinicians as a whole have been over concerned with the possible untoward results likely to follow if serum is administered subsequent to previous doses of antitoxin and toxin-antitoxin. (J. A. M. A. June 2, 1928).

Dr. Park states in his latest book that so far as immunizing injections of antitoxin are concerned there is no question that there is a definite sensitization of those who are injected. There is, however, no evidence that this sensitization produces a change which makes later intra muscular injections of the serum dangerous. Intravenous injections should always be given very slowly and in these cases with extreme care. A hypodermic syringe and adrenalin solution should always be at hand.

Park further states that he has compared records of more than 90 persons who received therapeutic doses of antitoxin and who had toxin-antitoxin injections from one to three years previously, with an equal number of records of children who had never received toxin-antitoxin. There were a few reactions in those who had received toxin-antitoxin which were a little worse than in those which had not received it. Whether this difference was due to the sensitization made by toxin-antitoxin or to the natural susceptibility of the children The difference was so slight is uncertain. in amount that no one would think of withholding toxin-antitoxin made from horse serum because of it.

So far as sensitization with toxin-antitoxin is concerned, we must remember that the amount of serum given in the three injections is very small, and is equivalent to about 0.0003 c. c. of horse serum globulin as compared with lc. c. in an immunizing injection of antitoxin.

Park states that he has used a preparation of toxoid made by Ramon's method in several thousands of children with results as good as

those obtained from the toxin-antitoxin. The goat antitoxin-toxin is as good as the horse antitoxin-toxin. It is perfectly possible to change to either o fthese. Toxoid is a preparation of diphtheria toxin which has been modified by being treated with either formaldehyde or iodine. The formaldehyde in the toxoid or the antitoxin in toxin-antitoxin have no part in the immunization. They simply modify the toxin so that more can be safely injected and not produce any local injury. (Public Health and Hygiene 2nd Edition. Wm. H. Park).

The most intensive campaign now being waged is in New York State. This was started in 1926 with the goal set to eradicate diphtheria in New York State by 1930. In 1927 Elbert County, Georgia put on a countywide campaign in that county with the result that fully 60 percent of the preschool children were immunized. This campaign was sponsored by the local Kiwanis Club and created such favorable comment that it attracted national attention.

A campaign to eradicate diphtheria from Anderson County was started in August 1928 and is still being carried on. This campaign has had the active cooperation of the Anderson County Medical Society. This work was made possible by funds available from the State Board of Health.

Anderson County has been the only county in the state, selected to carry on this demonstration. Other counties may follow if there are funds available from the same source.

At present about 9000 inoculations of toxinantitoxin mixture have been administered. which means that about 3000 children have been protected from diphtheria. Clinics have been held at various places over the county, the local physicians conducting the clinics in the towns and the Health Unit in the rural Belton, Belton Mill, Honea Path, sections. Honea Path Mill, Pendleton, Autun, Townville, Williamston, Pelzer, Piedmont, Piercetown, McElmoyle, White Plains, Rock Hill, Concrete, Three and Twenty, Bowen, Long Branch, Sandy Springs, Kennedy Street School, Anderson Mill, Riverside-Toxaway Mill, Calhoun, Southside School and Anderson have had this service. It would have been impossible have attained this marked success with the

clinics without the cooperation and interest of the members of the Medical Society who have forwarded this work.

Records have been made for each child immunized, giving name, age, and address, also dates of receiving the inoculations. These records will serve as a basis for making a study

over a period of years, in order to show the effectiveness of diphtheria immunization with toxin-antitoxin mixture. A comparative check will be made of all children who are treated for diphtheria with antitoxin for the next three years.

INTERNAL MEDICINE

J. H. Cannon, M. D., F. A. C. P., Charleston, S. C.

HEART DISEASE

By Haven Emerson, M. D., Survey Graphic, November 1924

Heart disease heads the list of causes of death while tuberculosis has fallen from the first to sixth place. Heart disease reduces the life span of its victims by one-half. Heart disease in a recognizable form, interfers with the work, play or comfort at least two million (2,000,000) people in the United States.

At least fifteen out of every one thousand school children have already acquired some type of heart disorder.

At least thirty out of one thousand men and women of working age have heart disease as a disability in their work or a handicap to their pleasures.

Ten per cent of the total bed capacity of our general hospitals is used, year in and year out, for care of cases of heart disease. Twentyfive per cent of all visits to our City Dispensaries is made by heart patients.

Of all serious and ultimately fatal diseases, those of the heart are of longest duration with possible exception of certain diseases of the mind. They cause the most persistent chronic handicap to self-support.

During the past fifty years, deaths in New York from heart disease have increased 42% while deaths from tuberculosis have fallen 44%.

In persons under twenty-five years of age, there have been more deaths from heart disease than from typhoid fever. Between years 25 to 34, heart disease kills more men and women than pneumonia.

Nine-tenths of deaths from heart disease are in persons over 40 years of age. For these later decades, no other cause of death compares with it in frequency. For every death from heart disease during a year, seventeen patients are alive suffering from it, whereas the comparable ratio in tuberculosis is about 7 cases for each death. In 1923, heart disease killed nearly three times as many people as did tuberculosis—more than twice as many as did cancer—more than half again as many as were killed by pneumonia. Moreover, it kills by inches.

A death of heart disease has typically back of it, a story of infection in childhood or early adult life; loss of working power in the most productive years; of a decade or more of slowly waning strength, leading to invalidism and finally death.

Dr. Emerson calls our attention to facts regarding heart disease that speak for themselves in terms admitting no argument.

The question forced upon us is, "What are we going to do about it?" especially when it is realized that our profession is one of the greatest sufferers, so much so, that is has facetiously been called the "Doctor's Disease."

The answer is to be found in the organization of an association of the profession and the laity for the purpose of studying the prevention and cure of heart disease; in a manner comparable to that now fighting tuberculosis. The American Heart Association has been organized for this purpose; and heart clinics are being established in all parts of the country.

South Carolina has never brought up the

rear in any progressive movement; and it is time that each of us should give a little thought as to how we, in our State, may best cope with this situation and work out plans for a beginning. This applies to men in all lines of work but especially to general practitioners, internists and pediatricians.

SOCIETY REPORTS

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SO-CIETY, HELD AT THE SHRINE HOSPITAL, MONDAY, SEPTEMBER 3, 1928.

The meeting was called to order at 8:20 P. M. with about 30 members present.

The minutes of the last meeting were read and approved as read.

Reports of clinical cases were then called for; no reports were heard.

The President then called on Dr. T. Boykins Clegg, Assistant Surgeon of the Shrine Hospital who presented a very able paper on the Treatment of Osteomyelitis. Dr. Clegg first stated that there were numerous forms of this disease. Successful treatment of asteomyelitis depends upon early diagnosis and the early elimination of the acute form by operation. The early cases should be incised and drained, care being taken to avoid trauma at operation. Vaseline gauze drains are very valuable. Dr. Clegg also mentioned that attempted sequestrectomy before 4 months invites trouble. When sequestrectomy is indicated all pieces of bone should be removed and all rough edges smoothed off. After operation it is advisable to immobilize the part in a suitable plaster cast. After operation it may seem that the osteomyelitis process may again become manifest but in reality this is only an abscess of the soft tissues which may be readily incised and drained.

Dr. Clegg then presented a series of interesting cases.

Discussed by Drs. White, Boyd, Brown, Tyler, Pack, W. S. Fewell; closed by Dr. Clegg.

A very favorable discussion of the Medical Exchange followed the scientific program.

There being no further business the meeting adjourned.

I. S. Barksdale, M. D., Secretary.

FOURTH DISTRICT MEDICAL ASSOCIATION, SENECA, S. C., OCTOBER 2, 1928

Program

Invocation—Rev. A. G. Harris, Seneca. Address of Welcome—Hon. C. F. Adams, Mayor of Seneca. Greetings—Dr. E. C. Doyle, Seneca. Response—Dr. Thomas Brockman, Greer.

- 1. Obscure Renal Haematuria—Dr. W. B. Lyles, Spartanburg.
- 2. Prenatal Care—A Professional Obligation, Dr. J. Decherd Guess, Greer.
- 3. Resistance—A Living Force—Dr. Burr Ferguson, Birmingham, Ala.
- 4. Brief Reports of Some Abdominal Cases— Dr. George E. Thompson, Inman.
- 5. Two Clinical Cases—(a) Tuberculosis of the Kidney and Tubercular Peritonitis; (b) Fistula in Ano, Dr. G. T. Tyler, Greenville.
- 6. Resection of Prostatic Obstructions with Sterns Resectoscope—Presentation of a new Instrument for Control of Hemorrhage. Slides.—Dr. T. M. Davis, Greenville.
- 7. A Few Considerations of "Biliousness" with Regards to Some of the Later Advances in the Function of the Liver—Dr. George R. Wilkinson, Greenville.
- 8. The Indiscreet Use of Iodine in Presence of Goitre—Dr. Hugh Smith, Greenville.
- 9. A General Practitioner Doing Part-Time Specialty in the "Sticks"—Dr. Wm. A. Strickland, Westminster.

Luncheon 1:30 P. M.

Officers

Dr. Thomas Brockman, Greer, S. C., President. Dr. G. R. Wilkinson, Greenville, S. C., Vice-President.

Dr. L. Rosa H. Gantt, Spartanburg, S. C., Secretary-Treasurer.

SEVENTH DISTRICT MEDICAL ASSOCIA-TION, MANNING, S. C., SEPTEMBER 13, 1928.

Program

Dr. George L. Dickson, Manning, S. C., President.

Dr. Carl B. Epps, Sumter, S. C., Vice-President. Invocation.

1. "Some Fallacies in Tuberculosis"—By Dr. R. B. Furman, R. 2, Sumter, S. C.

- 2. "Extravasation of Urine from the Lower Urinary Tract"—By Dr. James J. Ravenel, Charleston, S. C.
- 3. "Raynaud's Disease"—By Dr. William H. Carrigan, Summerton, S. C.
- 4. "The Gall-Bladder Complications of Typhoid Fever"—By Dr. N. Barnwell Heyward, Columbia, S. C.
- 5. "Colitis. A Short Discussion of Causes, Symptoms, and Treatment"—By Dr. Hal M. Davison, Atlanta, Ga.
- 6. "The Treatment of Intractable Pain"—By Dr. Charles E. Dowman, of Atlanta, Ga. (Illustrated with lantern slides.)
- 7. "Endometral Transplant in Abdominal Wound Following Cesarean Operation"—By Dr. E. T. Kelley, Kingstree, S. C.
- 8. "A Three Minute Paper"—By Dr. L. C. Stukes, Summerton, S. C.
 - 9. Report of Clinical Cases.

THIRD DISTRICT MEDICAL ASSOCIATION, HELD AT GREENWOOD, S. C., OCTOBER 4, 1928.

Papers

- 1. Blood Pressure and Its Intrepretation—Dr. Eugene Power, Abbeville, S. C.
- 2. Public Health—Dr. James A. Hayne, Columbia, S. C.
- 3. Non-Valvular Diseases of the Heart—Dr. Stewart R. Roberts, Atlanta, Ga.
- 4. Urinary Interpretations—Dr. W. P. Turner, Greenwood, S. C.
- 5. Gonorrhea—Male—Dr. J. F. Woods, Ninety Six, S. C.
 - 6. Clinical Cases.
 - 7. New Business.
 - 8. Election Officers.
 - 9. Barbecue—Power House, 5 P. M.

Dr. C. J. Scurry, Greenwood, S. C., President. Dr. J. Marion Symmes, South Greenwood, S. C., Vice-President.

FOURTH DISTRICT MEDICAL SOCIETY MEETS AND VISITS NEW JOURNAL AND ASSOCIATION HEADQUARTERS.

The Fourth District Medical Society held its twenty-second annual meeting in Seneca and were most delightfully entertained by the Oconee County Medical Society. Sixty three members attended the meeting.

The scientific program was most interesting, all of the papers being of general interest to the members and consequently were freely discussed. Dr. Burr Ferguson of Birmingham, Alabama,

made an interesting talk on White Blood Cells and Their Power to Restore Health When Properly Stimulated and gave several case reports. Dr. Thomas Brockman presented two asthmatic patients who had been materially benefitted by using the treatment and technique for stimulating the white blood cells as outlined by Dr. Ferguson. Dr. G. T. Tyler of Greenville demonstrated two interesting cases one of Tuberculosis of kidney and one Whitehead's operation on the rectum.

The Oconee County Medical Society provided a most delightful luncheon prepared and served by the Parent Teachers Association. An interesting part of the program was a visit to the new head-quarters of the State Medical Association and Journal and Dr. Hines, the Secretary and Editor was congratulated on the appearance and facilities of the new officers. Dr. Hines, with the other members of the Committee on arrangements, Drs. W. C. Marett and J. S. Stribling both of Seneca, were untiring in making this twenty-second meeting most successful and enjoyable.

The Society will hold its next meeting in Central, Pickens County, as guests of the town of Central.

The newly elected officers are as follows:
President, Dr. E. C. Doyle, Seneca, S. C.
Vice-President, Dr. J. L. Bolt, Easley, S. C.
Secretary-Treasurer, Dr. W. A. Strickland,
Westminster, S. C.

L. Rosa H. Gantt, M. D., Secretary.

THE UROLOGICAL ASSOCIATION OF SOUTH CAROLINA

Place of Meeting: Francis Marion Hotel, Charleston, S. C.

Time: Tuesday, October 30, 1928, 6:30 P. M.

Program

Meeting called to order promptly at 6:30 P. M.

Banquet

"Presidential Address"—Dr. Milton Weinberg, Sumter, S. C.

"Resection of Obstructions at the Vesical Orifice, Presentation of an instrument for the Control of Hemorrhage, Slides"—Dr. T. M. Davis, Greenville, S. C.

"Urinary Antiseptics"—By our invited Guest— Dr. Montague Boyd, Atlanta, Ga.

"Horseshoe Kidney with Report of Two Cases"
—Dr. O. T. Finklea, Florence, S. C.

Report of Clinical Cases.

Milton Weinberg, M. D., President. W. B. Lyles, M. D., Vice-President.

Hugh E. Wyman, M.D., Secretary-Treasurer.

PROCEEDINGS AT THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, OCTOBER 9TH, 1928, AT 8:30 O'CLOCK.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present, Drs. A. E. Baker, A. E. Baker, Jr., Banov, Beach, Buist, Burn, Cannor, Cathcart, Chamberlain, Deas, de Saussure, Jackson, F. B. Johnson, Kollock, La Roche, Lynch, McCrady, B. K. McInnes, G. F. McInnes, Maguire, Martin, Mitchell ,Mood, O'Driscoll, Plowden, Prentiss, Prioleau, W. M. Rhett, Richards, Rutledge, Sanders, W. A. Smith, Sparkman, Taft, I. R. Wilson, Robert Wilson. (36).

Guests: Dr. R. H. Lanning, U. S. N.; Dr. A. P. Morton; Dr. Coggin, D. D. S., Roper Hospital.

The minutes of the meeting of June 26th were read and confirmed.

Under Reports of officers of Committees, Dr. R. S. Cathcart, Chairman of the Committee on the Ross Estate, read as follows:

To the President and Members of the Medical Society of South Carolina

Gentlemen: The Committee on Ross Estate begs to report that they received on July 7, 1928 from the Executors of the Ross Estate the sum of Ten Thousand Dollars, (§10,-000,00) on account of the income from the residuary estate devised to the Medical Society of South Carolina as Trustee by the said Mary Jane Ross; Harry P. Jackson, M. D., President and W. Atmar Smith, M. D., Secretary, executing the receipt for the Society.

This Committee also received on August 16, 1928, from the Executors of the Ross Estate the sum of One Hundred Thousand Dollars (\$100,000.00) on account of a partial distribution of the principal of the residuary estate devised to the Medical Society of South Carolina, J. W. Burn, M. D., Vice-President and W. Atmar Smith, M. D., Secretary, executing the receipt for the Society.

On August 24, 1928 this Committee instructed its Treasurer, A. J. Buist, M. D., to deliver to the Board of Finance of the Medical Society of South Carolina a check for onc Hundred Thousand Dollars (\$100,000.00).

On September 4, 1928 this Committee instructed its Treasurer, A. J. Buist, M. D., to deliver to G. McF. Mood, M. D., Chairman of the Board of Commissioners of Roper Hospital, a check for Ten Thousand Dollars, (\$10,000.00).

Committee on Ross Estate

H. P. Jackson, Ex. Off.,G. McF. Mood,A. J. Buist,R. S. Cathcart, M. D. Chairman.

It was moved, seconded and carried that this report be received as information, and spread on the minutes.

Dr. R. S. Cathcart, Chairman of the Board of Finance, made the following report:

To the President and Members of the Medical Society of South Carolina

Gentlemen: The Board of Finance begs to report that they received from the Committee on Ross Estate on August 24, 1928, a check for One Hundred Thousand Dollars (\$100,000.00) being partial payment on the principal of the residuary estate under the terms of the Will of Mary Jane Ross. The Board of Finance has invested this amount to

the credit of the "Ross Henry Memorial Fund" according to the terms of the Will of Miss Mary Jane Ross.

Board of Finance
Edward F. Parker,
G. McF. Mood,
H. P. Jackson, Ex. Off.,
R. S. Cathcart, M. D.

It was moved, seconded and carried that this report be received as information and spread on the minutes.

The President reported that as a member of the Committee on the Alston Bequest, through the Bonding Department of the South Carolina National Bank, he had transferred the U. S. Third Liberty Loan Bond due September 15, 1928, for U. S. Fourth Liberty Loan Bond, and had turned over the proceeds of this transfer, which amounted to fifty-seven cents (57c) to Dr. G. McF. Mood, Treasurer for the Finance Board.

Dr. W. C. O'Driscoll, Librarian, made the following report:

During the summer the Superintendent of the Roper Hospital reported to the Librarian that he had some books of the Medical Society in a room in a part of the hospital which was going to be renovated and that the space was needed and requested the librarian to remove the books.

A consultation was held with the Superintendent, and with the Chairman of the Board of Commissioners, and no possible place could be found to put the books.

It was then found necessary to remove them here. Upon attempt to do this it developed that they could not all be placed here. Later consultation with the Superintendent of the Hospital secured a place which had now become vacant in one of the annex buildings of the Roper Hospital, and those not removed here and those on the tables and ledges will be removed there.

Investigation brings out that these books were placed in this room for storage some years ago—about 12-14—by a physician who was hired by the Society to sort out the library books. It is said that these are duplicates.

A preliminary examination of them indicates that at least some of them are valuable, and does not disclose how many are valuable. They will be sorted and arranged. They have previously been piled indiscriminately.

W. C. O'Driscoll.

On motion, this was received as information.

Dr. Cathcart asked that steps be taken to have books belonging to this Society, which are now in the Surgeon General's library, returned to this Society, and called attention to the fact that nothing appears on the minutes as to what books are on file in the Surgeon General's library. The Librarian stated that he would call a meeting of the Library Committee at an early date, and take up this matter.

The Secretary read a letter from Dr. William G. Gamble, requesting that this Society give him a certificate of recommendation, in order that he may obtain reciprocal medical registration in the state of Missouri. On motion, the request of Dr. Gamble was granted.

The Secretary read the following extract from a presentment of the Grand Jury of September, 1928, which he had received from the Clerk of Court:

Domestic Servant's Health:

We again recommend that all persons in domestic employ should be required to pass health examination at certain intervals. We recommend a copy of this be sent to the Medical Society of South Carolina and County Board of Health.

Wm. H. Dunkin, C. C. C. P. & G. S.

It was moved, seconded and carried that this be received as information.

The Secretary read a letter from the Secretary of the Board of Commissioners of the Roper Hospital, transmitting a letter which this Board had received from Mr. Lionel K. Legge. Mr. Legge's letter is as follows:

September 27, 1928. Roper Hospital Calhoun St.,

Sept. 24, 1928

Gentlemen: The City of Charleston is contemplating a development of the entire waterfront on the Ashley River from the west end of Tradd Street to the new Citadel. The Committee in charge of investigation into the project has requested me to communicate with the various owners of these properties, with a view to ascertaining to what extent the City may count on their cooperation, and at what price and under what conditions they would agree to pool their interests with those of the City in this extensive municipal enterprise

My information is that you are the owner of approximately 2.82 acres in the section proposed to be included in this development.

The City of Charleston, while owning approximately one hundred and fifty-four acres in this section desires not to make this development in piecemeal, but as a simultaneous development of the entire western waterfront, according to a unified and coherent plan for the development and beautification of the entire tract. To accomplish this, it must have the cooperation of the owners of these properties.

- I would appreciate it therefore if you will advise me as scon as possible as to the following:
 - 1. May the City count on your cooperation?
- 2. The exact acreage, and the description, if possible, of the property owned by you in this section.
- 3. The names, if you know them, of the owners of the property adjoining yours within the area proposed to be developed.
- 4. At what price and under what conditions would you agree to pool your interests with the City in this municipal enterprise to be conducted by the City directly or through its assigns?

Anticipating the favor of a prompt reply, I am

Yours very truly,

Lionel K. Legge,

Corporation Counsel.

It was moved, seconded, and carried that this matter be referred to the Board of Commissioners for consideration and advice as to action to be taken in the matter, the Board to report back to the Society.

Dr. A. J. Buist read a letter from Dr. Taylor, of Columbia, requesting certain information about the Sims Memorial Fund. Dr. Kollock reported that such funds as he had had in his possession for the Sims Memorial had been placed in the Commercial National Bank, and the whole matter turned over to the Women's Auxiliary of the Medical Association.

The Secretary stated that he had received a letter from Dr. Floyd L. Echols requesting withdrawal of his application for membership in this Society.

The Secretary stated that Dr. R. B. Gantt was ill, and would be incapacitated for some time. He moved that Dr. Gantt's dues for the current year be remitted, and that he be retained as an active member of this Society. This motion was seconded and carried.

The Scientific Session was called at 9:00 P. M. Dr. R. B. Taft exhibited an X-ray picture of a successful bonegraft.

The symposium on Rabies in Charleston was opened by Dr. Leon Banov. Dr. Banov gave a brief history of the disease and pointed out a number of cases which had existed in Charleston, and gave an outline of methods they use for its prevention.

Dr. B. K. McInnes gave a brief outline of the symptoms of the disease as it appears in lower animals, and stressed the importance of using prophylactic inoculation and muzzling, to prevent the spread of the disease.

Dr. C. McF. Mood presented the bacteriological and pathological aspects of the disease.

These papers were discussed by Drs. D. L. Maguite and F. B. Johnson, Drs. Mood and McInnes closing.

The meeting adjourned at 10:00 P. M.

W. Atmar Smith, Secretary.

RIDGE MEDICAL ASSOCIATION

The Ridge Medical Association held its regular meeting Monday night the fifteenth of October in Dr. Timmerman's office.

An interesting clinical case was presented by Drs. Gibson and Timmerman, it being a case of empyema following two attacks of pneumonia. Although a resection was done the child remained desperately ill for about six months but now seems fully recovered. Another child in the same house had empyema a few weeks before this one but he recovered rapidly.

Drs. R. H. Timmerman and D. M. Crosson gave short sketches of a number of deceased doctors who formerly lived in this territory.

After the meeting supper was served in the Batesburg Hotel where some of our druggists and preachers feasted with us.

Our meeting especially the last part was extra good. We think it wise for the different professions to occasionally meet together.

Dr. K. L. Able of Langley honored us with his presence.

Dr. and Mrs. J. S. Black have gone to Florida for the winter.

W. P. Timmerman, M. D., Secretary.

OBSTETRICS AND GYNECOLOGY

R. E. SEIBELS, M. D., COLUMBIA, S. C.

PUERPERAL SEPSIS

During January and February, 1927, one hundred and sixty-three women were delivered in the Sloane Hospital For Women in New York. Twenty-five of them developed strept-ococcus sepsis and nine died, a mortality of 36%. After a most exhaustive study, two of the surgeons and twenty nurses were found to have hemolytic streptococci in the nose and throat. All of these attendants were excluded from contact with the patients and the epidemic was controlled.

This Hospital is one of the best in America and operates with a closed staff. As it is a teaching institution and the technic is most rigidly carried out, that such a serious epidemic should have broken out and with such a high mortality, should be a warning to all of us who do obstetrics that we cannot be too careful in preventing contamination of patients at delivery.

The maternal death rate in South Carolina continues to be among the highest in the United States, and one-third of these deaths are due to puerperal sepsis. While it may not be feasible in country practice to carry out to the fullest elaborate technic used in the hospital, physicians should wear a gauze mask covering the nose and mouth at delivery, and especially is this important when he is suffering from a cold. All persons with nose or throat infection should be excluded from contact with the mother and baby, as it was demonstrated during the influenza epidemic that in ordinary conversation bacteria laden saliya was expelled from the mouth for a distance of three feet.

PLACENTA ACCRETA

Placenta accreta is relatively rare in this country, but it occurs with sufficient frequency and is so serious that it should be in the mind of every obstetrician whenever the characteristic third stage of labor varies.

Separation of the normal placenta does not occur without bleeding, and there are three clinical signs of its separation which are always evident: first, uterine bleeding; second, descent of the umbilical cord, and third, the characteristic ball-like shape of the fundus. Conversely, when there has been no manipulation to cause partial detachment of a placenta accreta, there is neither hemorrhage, descent of of the cord, nor change in the position of the fundus.

In the presence of these signs of placenta accreta, the patient should be fully anesthetized and a gloved hand passed into the vagina and the interior of the uterus carefully palpated to see if a line of cleavage between the placenta and uterus is present. In the ordinary case of adherent placenta, this line of cleavage can be readily found, but in its absence the indications are for the prompt removal of the uterus.

The condition is due to the insufficient development or entire absence of the decidua basalis so that the placenta is inserted directly on the muscularis with or without an invasion of the myometrium by the chorionic villi. Occasionally, these villi penetrate the muscle and may be seen under the peritoneum. This anatomical fact shows why attempts to remove the placenta almost invariably result in death from either hemorrhage or infection.

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The Journal

of the

South Carolina Medical Association

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The Iournal

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PEDIATRICS

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E. L. HORGER, M. D., State Hospital, Columbia, S. C.

MEDICAL RESERVE CORPS
COL. J. E. DANIEL, Med. Res. Greenville, S. C.

EDITORIAL

DEATH OF DR. H. M. STUCKEY

It is with a keen sense of our loss that we announce the death of Dr. H. M. Stuckey of Sumter, an Honorary Fellow of the South Carolina Medical Association. Dr. Stuckey died at St. Elizabeth's Hospital, Richmond, Virginia, after an illness of several months, November 18, 1928. He joined the South Carolina Medical Association at Columbia, April 25, 1895, having been a member for over thirty years, he was entitled to Honorary Fellowship. Dr. Stuckey was a pioneer in the establishment of the small hospital in the small city of the South. He with the late Drs. S. C. Baker, A. C. Dick, Walter Cheyne, and Archie China established the Sumter Hospital now the Tuomey Hospital. Dr. Stuckey had served medical organization in numerous honorable capacities. He was a splendid business man as well as a highly successful physician. He graduated from Davidson College,

had one year in medicine at the University of Virginia, and received his medical degree with honors at the Medical College of the State of South Carolina in 1891 serving an internship at the Charleston City Hospital. Not only medical but religious, social, and fraternal circles will miss sorely this splendid upstanding physician and citizen.

THE CHARLESTON MEETING

Committees are now at work on the various details of the meeting of the State Association in Charleston in April 1929, the exact date of which will be announced shortly. President R. E. Hughes of Laurens with his experience as a successful leader in organized medicine anticipates the greatest meeting in all the long history of organized medicine in South Carolina. The trend of medical society programs is toward bigger and better

clinics of a practical nature at each meeting. Perhaps this movement is now approaching the zenith of its interest and it is fortunate that in the white heat of this concentration of effort our meeting in Charleston in 1929 will have at hand one of the most efficiently organized medical school clinics in this country. The Medical College of the State of South Carolina with the very large clinical material of the Roper Hospital just across the street, the Baker Infirmary, the St. Xavier, the government hospitals and other clinics of the city of Charleston afford unusual opportunities to study at first hand all of the diseases of the South Atlantic States. The pathological conferences at the Medical College which have been so enthusiastically attended by the post graduate classes should prove an additional inspiration for the members of the State Medical Association. The city of Charleston in the spring is an ideal pleasure resort for thousands of people from all over the United States. Magnolia and Middleton gardens with their world wide fame should alone attract especially the large membership of the Woman's Auxiliary of the State Association. The splendid modern hotels in Charleston now will provide every possible accommodation. To those who play golf this feature will be well taken care of. The list of invited guests includes Dr. William S. Thayer, President of the American Medical Association, whose medical reputation extends throughout the civilized world and his scholarly contributions to medical literature are known of all medical men. He is no stranger in South Carolina having visited us in other years and always to the delight of the profession. It is really not necessary to recount the above allurements to induce the members of State Medical Association to attend the meeting in Charleston. A simple invitation is all that is necessary for they know everything else will be just as it should be in the way of cordial good fellowship and charming hospitality. We must say a word, though, about the attendance at the Columbia meeting in 1928 for it will be hard to surpass. It will be recalled that there were more than five hundred doctors and public health workers and nearly two hundred members of the Woman's

Auxiliary making a total attendance of about seven hundred. For the ratio of our membership this record is not exceeded any where else in the United States.

CHESTERFIELD COUNTY SOCIETY HOLDS GREAT MEETING

Elsewhere in this issue we publish the splendid program of the Chesterfield County Medical Society which drew an attendance of nearly one hundred from a large territory in this and other States. Such a meeting bears out the testimony coming from various sections of the country to the effect that the small county medical society may if it has the proper leadership put on programs that approximate the dignity and importance of a district meeting. Several other localities in our State have done the same thing with spectacular success. The principle is sound, we believe, that a worthwhile program given due publicity never fails to secure creditable attendance regardless of the size of the society.

SECRETARY-EDITOR ATTENDS CON-FERENCE IN CHICAGO

One of the most far-reaching, practical programs, yet put on by the annual conference of Secretaries and Editors of State Associations was that held in Chicago, November 16-17, 1028. The acute question of the cost of medical care was stressed by President elect M. L. Harris of the A. M. A., which he believes the medical profession should immediately take in hand and seek a satisfactory solution of the problem. The question of programs for State Medical Societies as well as County and District Societies was widely discussed and the experience of Secretaries and Editors from all parts of the country outlined. Many of the speakers brought forward the fact that the small county medical society can be made attractive, interesting, helpful, educative, satisfying to the medical man if properly conducted. A good Secretary, especially, is considered to be always the pivotal man in making any of these societies successful. This leads to the observation, that, at the present

elections for officers of our constituent county societies is in order and great care should be taken in selecting both the President and the Secretary. The Conference considered many phases of medical journalism as embodied in the official organ of State Medical Societies. They all appear to have made wonderful improvements as the years have gone on and almost without exception received the loyal support of the American profession. Many other matters were discussed looking toward the unifying and concerted action of the medical profession of America.

TAKE A GOOD LOOK AT THIS JOURNAL, DOCTOR

We believe this issue of the Journal is worthy of careful perusal from cover to cover. The Departmental Editorials are of particular value. We have been stressing in recent months the menace of heart disease as outlined by Dr. Cannon in the Department of Internal Medicine. We should take active steps to promote organized effort to reduce the mortality in South Carolina.

The paper on Syphilis of the Stomach by Dr. Murray of Greenville, deals with a rare disease and to those who are so inclined further studies are available in the Archives of internal medicine for November 1928 by Singer and Dyas of Chicago.

Dr. Doughty calls attention to Spinal Cord Tumors, also a condition not so often seen in our State at least.

Diseases of the spleen continue to be investigated all over the world with much yet to be settled. Dr. Rhame has made an important contribution to the information available. To those who have not done so we would urge the careful study of the records of the Mayo Clinic especially in their research laboratories on this subject as worthy of special consideration.

The matter of nutrition is now being stressed by the new department of nutrition at the

Medical College of the State of South Carolina. Dr. Pollitzer calls attention to the general subject in his editorial as it refers to children.

One of our most consistent departmental editors is Dr. J. F. Townsend Charleston, S. C. He has something good every month without fail and this time gives extensive reference to the developement of the mastoid process.

The monthly society reports are always of keen interest to the members of the Association.

Our advertisers deserve special mention. They represent the most ethical business concerns in the country and most of them have been loyal supporters of the Journal for many years.

We believe our Journal looks well. It is printed on good paper. After careful consideration the type used in printing the Journal lends itself readily to easy and comfortable reading. Our printers have had charge of the Journal for more than a decade and have given careful thought to putting out a creditable magazine.

THE SIM'S MEMORIAL

We have said little in the last few months about the progress of the Sim's Memorial but progress is being made. This is a major project of the Woman's Auxiliary in cooperation with the State Medical Association. The funds from the members of the Association. from the Auxiliary, and from many friends in and out of professional life have been generously contributed and the total amount will be matched dollar for dollar by the State. Mr. Edmond Quinn, the sculptor of New York is working on the bust. Mr. Sterner, the architect, is preparing a suitable shrine of marble. It is said to be very beautiful and graceful. It will be placed on the southeast corner of the State House grounds. Tentative plans call for completion and unveiling of the memorial about April 1, 1929.

ORIGINAL ARTICLES

THE DIAGNOSIS AND SURGICAL MANAGEMENT OF SPINAL CORD TUMORS*

By Roger G. Doughty, B. S., M. D., Columbia, S. C.

Through the brilliant work of the many men now devoting all or most of their time to the diagnosis and treatment of surgical lesions of the central nervous system, it has been found that compression of the cord by tumors, inflammatory or otherwise, is by no means as uncommon as it was once thought to be, that nearly all of these cases can be correctly diagnosed before operation and that approximately sixty per cent of them can be cured.

A slowly progressive damage to the cord may occur from a wide variety of causes. We are considering only those, however, which give rise to gradually increasing pressure or to a slow invasion and destruction of the cord. Such lesions first produce an irritation of the nerve tissue which is later followed by interruption of function and then by destruction. Tuberculosis of the spinal column or erosion of the vertebrae by an aneurysm and new growths of bony origin, can usually be easily demonstrated. Tumors within the canal, either intra-dural or extradural, are often not so readily diagnosed. These new growths may originate within the cord itself or they may arise from the coverings of the cord. The glioma is probably the most common medullary tumor; the various endotheliomas, taking origin from the meninges, the most easily dealt with.

Pachymeningitis externa must be considered in any discussion of cord tumors. It is a purulent involvment of the fat and connective tissue lying between the bony wall and the meninges. It may be acute or chronic and it presents the picture of cord pressure plus infection. Bacteria gain entrance to the

area either through the lymph vessels which have been shown to connect these tissues with the skin and subcutaneous fat of the corresponding level, or by way of the blood stream. Cord symptoms may not appear until long after the original skin lesion has healed.

Four outstanding contributions have been made to the diagnostic methods available. None of these is limited in its application to the diagnosis of tumors alone. The most recent one is that of Fay, who pointed out that the upper limit of the lesion in the cord could be quite clearly shown by the vasomotor response as brought out by the application of hot and cold towels to the skin. The vasomotor instability at and below the level of the injury is so marked that it can be successfully photographed in some of the cases.

The intra-cranial pressure can be raised at will by compression of the jugular veins. Queckenstedt, in 1916, called attention to the fact that this increase in pressure could not be transmitted to the lumbar puncture needle if the free passage of the fluid down the canal was blocked. This then is an easy and safe method for determining a complete "shut-off" of the canal, be the cause what it may. A partial block may result in a prompt transmission of the increase in pressure but a failure of the manometer level to return to normal on the release of the jugular veins.

Air may be introduced into the canal through the lumbar route. With the patient in an upright position it normally passes to the ventricles very promptly. Its failure to do so can only mean that it has been arrested somewhere along the line. The X-ray, usually, will show the location.

lodized oil is a material that throws a dense X-ray shadow. It may be injected into the canal either through the lumbar route or through the cysterna magna. The undiluted material is heavier than the spinal fluid and may therefore be made to travel up and down the canal behaving much as a drop of mercury in a bottle of water. Though it will show some

^{*}Read befort the South Carolina Medical Association, Columbia, S. C., April, 78, 1928.

lesions that are not otherwise demonstrable there are sharp limitations upon its use.

Striking as these four advances in "methods" have been, the clinical findings remain the most important and vital elements in the diagnosis. A gradually progressive, bilaterial, spastic paraplegia throws the burden of proof upon the clinician who refuses the diagnosis of spinal cord tumor. The addition of a level of sensory disturbance localizes it and good reasons are demanded for any further spinal diagnostic proceedures. Only rectal and vesical incontinence would then be needed to complete the "great triad" as Dandy so aptly called this group of symptoms.

Pain is the most important symptom largely because it is usually the presenting one. It is of three types: first, localized pain from direct involvment of the sensory roots, socalled root pain; second, pain from pressure on the sensory tracts; third, aching from the intraspinal pressure. Pain from pressure on the sensory tracts, no matter where the lesion so long as it is in the cord, radiates to the legs, one or both, and is almost always labeled "sciatica." Straining, as when at stool, may make the pain very much worse and such a complaint should make the physician suspect a cord tumor. A simple lumbar puncture i.equently accentuates the pain markedly and is a sign well worth remembering. It is in this first, or irritative, stage that the diagnosis is most difficult but the prognosis from surgical intervention best.

With the beginning of cord destruction the deep reflexes below the lesion become exaggrated, clonus appears and paralysis of the voluntary muscles occurs. Finally, bladder and rectal control are lost and the picture completed.

Surgery can and does offer the only possible relief. A typical laminectomy is done. The site of the tumor is located if possible before the dura is opened. The absence of pulsation below helps considerably at this stage. If the dura is opened below the lesion and there is present a complete block of the canal, the cord neither pulsates nor is there any considerable flow of spinal fluid. Before any attack is made upon the tumor it should be thoroughly exposed in its entirety. The dissection of the

tumor is best carried out from above downward. Extreme care and gentleness are essential but it is well to remember that the lesion being dealt with is a serious one calling for radical measures. After the removal of the tumor the dura is closed tightly, the muscle sutured and the skin closed without drainage. In patients having a rectal incontinence due to a tumor in the lumbar region the problem of keeping the wound clean is difficult of solution but is not impossible.

The return of function to the involved parts depends entirely upon the amount of permanent damage sustained by the cord both from the tumor and from the operation. At best a considerable time must elapse before the extent of permanent disability, if any, can be determined.

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Several slides of X-ray plates were thrown on the screen. These showed cord tumors demonstrated by lipiodal and were accompanied by a discussion of each plate.

DISCUSSION

Dr. George H. Bunch, Columbia: I think we have to thank Dr. Doughty for bringing to our attention a condition which we are apt to forget in making a diagnosis in the obscure case. When we have symptoms suggestive of tumor, I think the first thing we have to consider is the possibility that they may be due to some systemic condition or toxemia, which should be ruled out. Second, they may be due to some infectionfocal infection, which should be eliminated. We have to differentiate tumors from general disease of the spine. Tumor symptoms begin at a certain level; we can distinguish the upper level of the symptoms of a tumor. When we try to determine the exact vertebra in which the condition occurs, we should remember that the spinal nerves do not always come off exactly where you would expect them to—that is, from the proper segment. If we go back to our embryology, in the embryo the spinal cord extends from the foramen magnum down to the lower end of the spinal canal, which is the end of the sacrum. In the adult the cord extends only to the body of the first lumbar vertebra, so that the spine has outgrown the cord. The canal has outgrown the cord, so that the segments do not correspond; and when we mention a segment of the cord we do not necessarily mean the corresponding segment of the bone.

Another thing we have to differentiate from tumor is inflammatory lesion. I had a very interesting case recently in a child of ten years, a boy who was in a tree and was pushed off a limb by another boy and fell four feet, so the history says. He was tender over the sixth dorsal vertebra. This boy ran about and played for a week. On the seventh night he awoke with both legs paralyzed and was unable to void. He had complete retention of urine. We considered, with the symptoms coming on so late, there was a possibility of hemorrhage in the cord. We had him x-rayed, and he showed fracture of the sixth dorsal vertebra. We operated and found, to our surprise, a collection of pus in the spinal canal but extradural, so-called purulent pachymeningitis. We drained it without opening the dura. That boy had complete paralysis of bladder and rectum and both legs. He stayed in the hospital two weeks. He was still unable to move his lower limbs but was regaining control of the bladder when he left the hospital, which has been a short time ago. I have not heard from him since but presume he is gradually improving.

Lastly, we have to consider tumors of the vertebrae. Nearly all of these are malignant. About half of these are metastatic from cancer of the breast and, in men, from cancer of the prostate.

The point I want to make is that these symptoms do not happen without a cause, and if we remove focal infection and other causes and are still at a loss to explain why these symptoms continue, then we must consider spinal tumor.

Dr. G. T. Tyler, Jr., Greenville: It is in comparatively recent time (1885) that the first spinal-cord tumor was removed. Sir Victor Horsley working in association with Sir William Gower operated successfully for this condition.

It is well to have our attention called to the fact that spinal cord tumors and injuries are not infrequent. If we have it in mind, so that spinal-cord tumor is excluded in our observation of the case, we are doing the patient a great service.

There are several features in the diagnosis. I shall mention a few. The patient may have precordial pain, which may be from a spinal tumor instead of from a heart attack. In the analysis of

the spinal fluid, there are several significant facts. First is the color; often xanthochromia is present. The globulin may be increased, and the fluid may clot very soon after removal. The cell count may be increased; frequently it is not increased. These four characteristics were described several years ago and are known as the Froin syndrome. These findings, according to Elsberg, appear in tumors low in the cord, the conus, or the cauda. Evidence of compression is often present.

If the patient's symptoms increase after a lumbar puncture, it is suggestive of one of two conditions: either extradural tumor, or one within the dura but attached to it.

The time permits only a short discussion. In closing, I want to thank Dr. Doughty for bringing this subject to our attention.

Dr. O. B. Mayer, Columbia: In conjunction with Dr. Doughty's paper, I should like to relate the following case: A white female, aged thirty-two years, gave the history of having pain in the lower extremities of seven or eight months' duration, followed in three or four months with paresis of the left leg and finally paralysis of it, to be followed by paresis of the right. There was incontinence of the bladder at times. Examination pointed to cord tumor in the lumbar region. The blood Wassermann was negative; the spinal fluid was negative; x-ray of the spine was negative. Incidentally, she was seven months pregnant.

To aid in diagnosis, about three cubic centimeters of lipicdol was introduced into the lower lumbar spinal canal. The patient was partially inverted. The slide shows the lipicdol high up in the thoracic region, or beyond the level of the suspected tumor. Some remained in the lumbar region, as is seen in the next slide.

The procedure showed that no block of the canal existed. There was very little reaction to the lipiodol; about an hour after the injection slight difficulty in breathing was complained of. It was felt that the procedure was justified. Some time later a positive spinal fluid was secured, and the diagnosis of transverse myelitis was made.

Dr. Doughty, closing the discussion: I wish to thank Drs. Bunch and Tyler and Mayer for their discussion.

The position of lipiodol is far from assured. Not enough cases have been reported to be sure that it is not without some danger. It is a foreign body, and theoretically, at least, it is not safe. There have been cases reported in which untoward symptoms were attributed to it, probably inaccurately.

Pain is of three types. It may be the root pain or girdle pain that comes around the body

and is frequently called neuralgia or kidney pain or angina. The localizing pain in the back is surprisingly often dismissed as being of neurotic origin.

The Queckenstedt test is not always reliable. In the two cases, where demonstrated tumors were removed surgically, one here and one in Baltimore the Queckenstedt test showed no block. In a case operated upon twice, before the second operation the Queckenstedt test showed a complete block.

The xanthochromia is probably due to leakage of blood into the spinal canal. It is of value, as are all the rest of the laboratory findings. A positive Wassermann may be of value but may be positively misleading. A colored patient had a negative Wassermann at first and later had a positive one. He was operated upon, however, and a definite tumor removed, which was not syphilitic in origin.

SPLENECTOMY IN PURPURA HEMOR-RHAGICA (ESSENTIAL THROM-BOCYTOPENIA)*

By J. Sumter Rhame, M. D., F. A. C. S., Charleston, S. C.

It is well known that Purpura Hemorrhagica is a distinct clinical entity, and we know that there are certain hematologic characteristics present during the active phases of the disease which are quite sufficient to differentiate it from other purpuric diseases. First a Thrombycytopenia or great reduction in the platelet count from 250,000—to 300,000 normal to less than 100,000 and even as low as 10,000. Second, a prolongation of the bleeding time, third, a subnormal retractility of the blood clot, tho' the clotting time itself is normal, and fourth, a lack of normal capillary resistance, giving the positive tourniquet test. The spleen is more or less enlarged.

The most important of the above is the platelet count, and we recall that the blood platelets are formed in the Megakaryocytes of the bone marrow and have to do with the clotting of blood. In Purpura Hemorrhagica, when the the blood vessels are injured, the effused blood clots. Thrombosis does not occur early in the injured vessels and the bleeding time is consequently prolonged.

Numerous subcutaneous ecchymoses, purpuric spots and petechiae usually occur, al-

*Read before the South Carolina Medical Association Columbia, S. C., April 19, 1928. though at times intermittent, and bleeding from the nose, throat, gums, stomach, intestines, genitalia and urinary organs, in women considerable loss of blood form uterine hemorrhage.

The disease appears to occur more frequently in the young, and is entirely different from Haemophilia in that it is not hereditary. In true Haemophilia there is no diminution of the platelets, the tourniquet test is negative, coagulation time is prolonged, and the bleeding time is usually normal.

In 1731, Werlhof separated Purpura Hemorrhagica from the other varieties of hemorrhagic diseases, and we find the disease running an acute, subacute, or chronic course, and especially do we find the subacute and chronic variety often rapidly proving fatal. Due to constant bleeding, the patient soon becomes exsanguinated, and death results. As the usual hemostatic agents employed do not seem to exert any beneficial effect upon the bleeding unless Nature interferes, as we find at times, the disease may disappear as inexplicably as it came on.

Most observers believe the diseased state of the capillaries is one of the factors responsible for the production of the disease, also, that either there is a reduction of the blood platelets because the Megakaryocvtes in the bone marrow do not produce a sufficient number or because they are produced and are immediately destroyed somewhere in the tissues, most likely in the spleen, which was thought by some, especially Kaznelson, to be diseased. So we find that in 1916 Kaznelson, subjected one of his patients to splenectomy, and the results are stated as brilliant, the bleeding ceased at once, hemorrhagic spots disappeared, platelet count returned to normal, bleeding time returned to normal, and the clotting followed by clot retraction, and there has been no recurrence of the disease in this case in over five years.

Purpura Hemorrhagica, as already mentioned, may follow a variable course, unpredictable, there may be a spontaneous cure, long remissions, unexpected relapses, or often times the acute fulminating case with rapidly fatal termination.

From literature available, we find that the only recent additions to the treatment include one or more of the following, blood transfu-

sions, so called protein shock, x-ray treatment of the spleen, and splenectomy.

Blood transfusion is the best emergency measure at our command and often a life saving one, yet at times fails utterly.

Under the treatment by protein shock we have the intra-muscular injections of horse serum, milk, coagulose and human blood; but do not give as good results as repeated blood transfusions.

Splenectomy from the present indications offers the best results and apparently cures, altho there has not been sufficient lapse of time since operation to establish a permanent status; there are a considerable number reported to have attained the status of "five year cures."

Allan W. Spence states that in an analysis of 101 published cases of Purpura Hemorrhagica treated by Splenectomy, it was found that "a good result with no recurrence of hemorrhage occurred in 69, and in six cases there was considerable improvement; 21 died after operation, while in 5 the hemorrhages continued with but slight improvement.

The histories of these cases show that 80 were considered chronic, and 12 acute, in 9 cases the duration of hemorrhage was not stated." Out of the 12 acute cases, 10 died, but of the chronic only 8, one being due to an accident and 3 to causes other than Purpura Hemorrhagica." He divided the cases into acute and chronic and states that splenectomy was beneficial in 80.9 per cent of the chronic and in 16.6 per cent of the acute."

In the Mayo Clinic, from April 1st, 1904 to October 15th, 1927, there were 23 cases of Purpura Hemorrhagica that had splenectomy performed, with one hospital death, and Dr. Wm. J. Mayo states that Purpura Hemorrhagica is one of the three conditions in which splenectomy "is seen at its best."

REPORT OF CASE:

White, female, unmarried, high school student, age seventeen, who came under my care January 4th, 1928.

CHIEF COMPLAINT:

"Bleeding from lower gums."

PRESENT ILLNESS:

Patient stated that on the morning of Jan-

uary 3rd, 1928 she began bleeding from the lower gums and nose. The epistaxis ceased soon after taking some medicine, but the bleeding from the gums had been persistant since the onset. She noticed a few hemorrhagic spots beneath the skin of the buttocks, back, neck and on the sclera of the right eyeball this morning (Jan. 4th, 1928). Had not noticed the stools being of darker color than normal, nor had she noticed any fresh blood in the stools. Had noticed no blood in the urine.

The patient stated that she tired very easily and that the slightest exertion caused breathlessness, languor, faintness and palpitation. At times she had some vertigo, but no headache This condition has been present for about three months. She had never noticed any swelling of the ankles or puffing in the orbital region.

The bowels were fairly regular,, no diarrhea. Had no polyuria, no burning on micturition. Had had no recent digestive disturbance. Had noticed no pain in the abdomen. No history of cough, night sweats or loss of weight.

The appetite for several months had been very poor. The patient's mother stated that the patient would eat practically nothing but sweets, such as candy, fruits, cake, etc. She very seldom ate vegetables or meats. Had not been taking any kind of drugs. Had received no kind of injury. Had had no temperature.

PAST HISTORY:

The patient had had measles, chicken pox and whooping cough when a child. Had pneumonia in 1924. No other serious illnesses. Had never had a similar attack to present one. No history of free bleeding from cuts or abrasions of the skin. Did not bruise easily.

MENSTRUAL HISTORY:

Menstruation began at the age of 12. Lasted from 3 to 5 days, usually 5. The menses had always occurred every 21 to 23 days. There was no dysmenorrhea and the flow was moderate in amount. The patient was menstruating when she entered the hospital. She stated that her menstrual period was due at this time. Had never been pregnant.

VENERAL HISTORY:

Patient gave no history of vaginal discharge or lesion on the vulva.

FAMILY HISTORY:

Father age 50, living and in good health. Mother age 42, living and in good health. Five sisters and one brother, all living and in good health. No history of bleeding tendencies in family. No history of any chronic familial disease.

PHYSICAL EXAMINATION:

On entrance to the hospital the temperature was 99 degrees F, pulse 120, soft and easily compressible. The blood pressure was 122/72. Respiration 24, costo-abdominal type. Nutrition good. Facies and general appearance normal.

The head was normal in size and shape. Fontanelles and sutures closed. The hair was moderate in amount, light brown in color and of medium texture. The skin of the face had a waxy, sallow appearance. The pupils were regular, equal and reacted normally to light and accommodation. The sclera of the right eye showed one petechial spot midway between the inner canthus and the iris. There were no petechial spots on the left eye. The conjunctiva of both eyes was of good color. No conjunctivitis or ptosis of the lids.

The nose and ears were negative to examination without a speculum.

Examination of the mouth revealed the presence of a full, apparently normal set of teeth which were in good condition. The mucous membranes of the mouth and pharynx were of good color, no anemic or hyperemic areas. The lower gums were spongy, sodden and showed evidence of hemorrhage. Blood was oozing from several points and there was a quantity of clotted blood between the gums and the buccal mucous membrane. The upper gums were spongy and sodden but no evidence of active hemorrhage or evidence of past hemorrhage was present. The tonsils were apparently not diseased. The tongue was not coated and protruded in the midline. No tremor.

The skin of the neck showed serveral irregular, petechial spots anteriorly. These petechial spots did not disappear on pressure, were not elevated, nor painful. Their size varied from $\frac{1}{4}$ inch to $\frac{1}{2}$ inch in diameter. There were no glandular enlargements, no abnormal pulsations, and no thrills.

The chest was well developed, expansion good and equal. The skin of the chest anteriorly and posteriorly showed petechial spots similar to those described on the neck. The ribs were not prominent. No depression or elevation of the sternum. No bulging of the intercostal spaces. No abnormal pulsations, masses or thrills. No rachitic rosary. Tactile fremitus apparently normal. There were no areas of dullness or impaired resonance. The breath sounds were broncho-vesicular. Vocal resonance and whispered voice sounds not increased. There were a few fine rales heard anteriorly at the left apex from 3rd rib up. A few medium rales were heard posteriorly at the border and angle of the left scapula. No friction rubs heard.

The apex beat was seen in the 5th interspace three fingersbreadth from the midsternal line. It was not diffuse. Palpation confirmed inspection. There were no thrills or friction rubs felt. The area of cardiac dullness was not increased. The first mitral sound was accentuated, other heart sounds clear, regular and of good quality but rapid. No murmurs, friction rubs or bruits noted. The radials were equal, regular, rapid, and of good quality. Easily compressible, no thickening. Blood pressure 122/72.

The abdomen was normal in size, and shape. There were no petechial spots on the skin of the abdomen. There was no distention, no fluctuation wave elicited. The spleen was not palpable. No organs or masses palpable. Lower border of liver could not be palpated. No tenderness, no rigidity of abdominal muscles. Liver dullness extended from upper margin of 6th rib, to the ninth rib on the right in the axillary line.

There were no abnormalities of the external genitalia. There was a slight, continuous, blood tinged discharge from the vagina which had a rather foul odor. A vaginal examination was not made.

There were no glandular enlargements.

Examination of the extremities showed several purpuric spots underneath the skin of both arms and legs similar to those previously described on the neck and anterior and posterior aspects of the chest. There was no swelling or other abnormalities.

The knee jerks were active. No anklections, no Oppenheim or Babinski signs present. Kernig's & Brudzinki's neck sign negative.

LABORATORY EXAMINATIONS:

Blood:

Hemoglobin 85% (Dare)

Red Cells 4,272,000.

Color Index 1.

White Cells 11,250.

Coagulation Time 6 min. (Boggs).

Bleeding Time 25 min. plus (stopped by pressure).

Achromia o.

Poikelocytosis o.

Anosacytosis o.

Abnormal Red Cells o.

Abnormal White Cells o.

S. & L. Lymphocytes 16%.

Mono & Transit 1 %.

Polynuclears 83%.

Eosinophils o%.

Basophils o%.

Platelet Count 78,000.

Clot retraction—None in (12 hours).

Blood culture—(Negative).

Tourniquet Test—Positive.

Urine: (Catheterized Specimen).

Color—Pale yellow, clear.

Reaction—Acid.

Sp. Gr.—1.013.

Albumin-o.

Bile—o.

Sugar-o.

Acetone—o.

Casts—o.

Mucus—o.

Pus-o.

Blood-o.

Epith—1 sq I R.

Sputum:

Negative for Tubercle Bacillus.

X-Ray:

X-Ray examination of chest was negative for tuberculosis or other abnormal conditions.

Patient was given horse serum 10 c. c. into the abdominal muscle and the nose packed with cotton in an attempt to check hemorrhage, 7½ grains of Calcium Chloride

was given intravenously which was followed by hemorrhage beneath the skin, soreness and swelling at site of injection.

The patient continued to have bleeding from the gums and also from the nose, when the packing was removed. Bleeding from the uterus continued and the stools and urine contained a quantity of macroscopic blood.

Repeated whole blood transfusions, direct method, were given:

January 6th, 1928—500 c. c.

January 9th, 1928-500 c. c.

January 11th, 1928—500 c. c.

January 14th, 1928—500 c. c.

January 17th, 1928-460 c. c.

January 21st, 1928-500 c. c.

These transfusions were not followed by reaction and the patient failed to show any appreciable improvement.

The Platelet Count rose to 149,000 Hemoglobin 86 by Dare, Red Blood Corpuscles 4,970,-000, Bleeding time 8 minutes and 8 seconds. Temperature 98.8, Pulse 100. Still bleeding from all mucous membranes but somewhat less.

Splenectomy was strongly urged, as patient's condition did not appear materially benefited and it was evident that blood transfusions could not be kept up indefinitely.

So on the seventeenth day after admission, (Jan. 21st, 1928), patient was given a transfusion of 500 c. c. whole blood, direct method, and immediately after this, operated upon.

Nitrous Oxide and Oxygen was given as an anaesthetic. Left sub-costal incision. Spleen was removed and the wound closed in layers without drainage. There was considerable bleeding from the uterus during the operation, but no more than would be expected from the incision under normal conditions.

The patient reacted quietly from the anaesthetic. The bleeding from all mucous membranes except the uterus, was checked immediately. Four days after the operation all bleeding stopped.

The wound healed by first intention, and the patient apparently making an uneventful recovery without complications until the 20th day after operation, Feb. 12, 1928. there was a slight elevation of the temperature and pulse, although the patient made no complaint. Hemoglobin 69, by Dare, Color index .78, Red Blood

Cells 4,400,000, White Blood Cells 15,925, Blood Platelets 290,000, Bleeding time 3 minutes, Polys 74%. Physical examination of right chest negative, left side tubular breathing and flat note, increased voice sounds, and increased tactile fremitus over entire left chest anteriorly and posteriorly. Patient has slight cough and complaining of shortness of breath. Left chest was aspirated and 1150 c. c. of light yellow cloudy fluid was obtained. Culture from fluid was reported negative. Ten days later left chest was again aspirated, 1000 c. c. of light yellow, cloudy fluid was obtained.

Blood Count:

Hemoglobin—65% (Dare).

Red Blood Cells—4,350,000.

White Blood Cells—12,950.

Polys-71%.

Blood platelets—220,000.

Temperature and pulse normal.

Feb. 26th, 1928, patient feeling fine, still some slight impairment over left base, otherwise chest negative. Temperature and pulse normal. Urine negative.

Blood Count:

Hemoglobin--70% (Dare).

Red Blood Corpuscles—4,520,000.

White Blood Corpuscles—10,940.

Blood platelets—270,000.

Polys-68%.

Bleeding time 3 minutes.

No evidence of hemorrhage from anywhere, gums look healthy, no purpuric skin manifestations. Patient allowed to go home, to be observed by attending physician.

PATHOLOGICAL REPORT, (Jan. 23rd, 1928) By Dr. Kenneth M. Lynch, Number 7388 Gross and Minute Appearance:

Spleen, weight 190 gms, of approximately normal shape and size, somewhat spongy, follicles seen but not very prominent.

MIC:

The outstanding structural change is a thickening of the walls of the sinuses of the pulp. This is largely by round cells, although the older fibrous element is prominent. The sinuses are lined by upstanding cells of the appearance of lymphocytes. The spaces are consequently easily seen. They contain a small amount of blood and some granular material. The follicles show prominence of the germinal centers

in some. There is slight hemorrhage in the pulp. The capsule is thin.

DIAGNOSIS: Chronic Splenitis:

The pleural fluid aspirated on two occasions injected into guinea pigs on Feburary 14th, and February 20th, respectfully. These pigs were killed on April 5th, and examination failed to reveal evidence of tuberculosis or other apparent disease.

NOTE:

Experimental innoculation of guinea pigs with preparations from fresh spleen, immediately after removal produced subacute, plastic peritonitis, and acute splenitis, with death in about a week. These pigs showed low platelet counts. If this experimental work proves worthy of report it will be published later.

April 9th, 1928 patient has resumed her school duties for the past three weeks, feels well and appears to be in good condition, excellent health with no complications.

Blood Count:

Platelet Count—374,000.

Hemoglobin—85% (Dare).

Erythrocytes—4,240,000.

Color Index—1.

Leucocytes—Sooo.

S. Lymphocytes, L. Lymphocytes—29.5%.

L. Mononeuclears, Transitionals—2.5%.

Polyneuclears—65.5%.

Eosinophyles—2%.

Basophyles-5%.

Achromia-X.

Anosocytosis—XX.

Poikelocytosis—X.

Bleeding time 3 minutes.

Coagulation time 3 minutes 40 seconds (Boggs).

X-RAY REPORTS:

X-Ray examination of chest with upright film shows no evidence of any deposit in lungs, Pleurisy or Fluid.

In closing I might mention that our knowledge of the spleen is very limited at present, and there is need for a vast amount of further investigations, we are making progress, but still it is too early to arrive at any definite conclusions. At the present time I would advocate blood transfusions and unless there is early tendency to recovery, splenectomy as a very promising life saving measure, if not a positive cure.

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HEALTH EXAMINATION OF THE EAR, NOSE, AND THROAT*

By Wm. B. McWhorter, M. D., F. A. C. S., Anderson, S. C.

Periodic Health Examination is the outgrowth of the modern idea of preventive medicine. It is the Doctor's business not only to make his patient well but also to keep him well so far as is possible. The human body is like an automobile. Some cars are made of good material and some of poor material. The life of the car depends upon the material of which it is made and upon the manner in which it is driven. So with the human machine. Longevity depends upon heredity and upon the individual's manner of living. Many of the diseases of middle and old age are slow in their development. When developed they can rarely be cured. They can often be prevented or deferred if discovered and properly treated in due time.

In order for the doctor to keep in touch with his patient periodic examination is a necessity. Every well conducted business takes at least one annual trial balance. How much more im-

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portant for the individual to have an occasional trial balance of his most precious earthly possession, his physical assets and liabilities.

As the public becomes educated to the value of these examinations the profession can expect more or less cooperation. It will be better for the family physician to do the work than to leave it to so-called Life Extension Institutes and Health Bureaus.

The ear, nose and throat are a part of the general economy. They should receive attention in every general examination. Not only may local conditions be disclosed which need correction but light may be thrown upon the diagnosis and treatment of certain general diseases.

It is the purpose of this paper to outline very briefly the most important points to be noted by the family physician in such an examination.

The Ear,—Health examination of the ear consists mainly in (1) testing the state of the hearing and (2) determining the presence of infection. For practical purposes the Ingersoll watch may be used to test the hearing. The normal ear should hear it at least ten feet. The degree of hearing may be noted in form of a fraction. If the watch is heard ten feet the hearing may be considered normal and the patient given 10/10. If heard only five feet the patient would be given 5/10.

An instrument called the audiometer has been developed by the Bell Telephone Laboratories and has been successfully used in testing the hearing of school children. The instrument enables the work to be done much more rapidly than by the older methods.

If the hearing is impaired then there is a cause for it which can usually be located. It is supposed to be in the field of the aurist to determine by further examination and functional tests whether the impaired hearing is of nervous or conductive origin and whether it is amenable to treatment. I would like to say that the treatment of deafness is rather preventive than curative. Its foundations are usually laid in childhood. Statistics reveal that in the United States there are more than three million people seriously handicapped by impaired hearing. Authorities concede that at least 80% of all cases of impaired hearing can be prevented

or its progress arrested if discovered and properly treated sufficiently early.

After noting the condition of the hearing the presence or absence of infection should be determined. Sometimes this is more or less difficult. A history of aural discharge and the presence of pus in the external auditory canals usually means infection of the middle ear. This may exist in many degress and may be acute or chronic. A purulent otitis media is a focus of infection which may at any time lead to serious complications either local or general. Its presence should always be noted. Fortunately practically all cases can be cured if discovered and properly treated in due time. Some cases will require radical operation.

The Nose,—The nose is concerned with the very important act of respiration. The function of the nose is to warm, moisten and filter the inspired air. If there is nasal obstruction both respiration and the olfactory sense will be interferred with. The nasal accessory sinuses are very prone to infection. Health examination of the nose consists mainly in noting the presence of chronic nasal obstruction and determining the presence of sinus infection. Nasal obstruction in adults usually results from malformations of the nasal bones or from polypoid growths. In children it is commonly due to adenoids. A history of pain or headache associated with tenderness over the sinuses and chronic nasal discharge generally means sinus infection. If there is evidence of obstruction or of infection then the nose is certainly not in a state of health and the patient should be marked for further study.

The Pharynx,—Health examination of the pharynx resolves itself mainly into inspection of the tonsil. What are the marks of a so-called diseased or abnormal tonsil in the child and in the adult? The answer is that excessive hypertrophy especially in the child is considered an abnormality. While the tonsils of all children are more or less hypertrophied some are certainly more enlarged than others. The larger the tonsil the more obstruction. Excessive hypertrophy must then be noted. The other point to be noted is evidence of chronic infection in the tonsil. Chronic congestion of the tonsil and pillars and cryptic retention are considered signs of infection. If these exist it

should be noted. This is about all that can be done in routine examination of the throat such as is done in schools and in the physician's office as a part of a general examination. Such an examination is not final and if the question of tonsillectomy is to be considered the patient is a candidate for further study.

Can we by the mere inspection of a tonsil definitely determine the advisability of tonsillectomy? The answer is that we can in the execessively enlarged tonsils of children. Very large tonsils in children are practically always accompained by large adenoids and together produce obstructive symptoms. The removal of such has proven to be of unfailing benefit. From the standpoint of infection, however, inspection is inadequate in both children and adults. Hypertrophy is no mark of the degree of infection present in the tonsil. The small ones have proven themselves to be as bad as the large. The local signs of infection in a given tonsil will vary from time to time. So we are forced to the conclusion that not by inspection alone can we definitely determine whether a given tonsil is diseased and whether it should be removed. The patient's general condition, symptoms and history must also be considered. The very best authorities attest to the fact that the removal of the least offensive tonsils often give very successful results.

DISCUSSION

Dr. J. F. Townsend, Charleston: I think with regard to the tonsil question the opening words of the essayist will possibly give the solution. He said the duty of the physician is not only to cure the patient but to prevent him from getting sick. If we look over the many reasons for the removal of tonsils-heart, lungs, kidneys, ears, rheumatism, neuritis, and things of that sortwe shall see that tonsils are most generally removed for some complication that they cause or will cause elsewhere. You may ask, if they cause these things, why not wait until such condition develops before taking out the tonsils? That probably would be a good idea, except that in some cases if we should wait until the heart lesion, for instance, develops, it might not go away with the removal of the tonsils. Take most people that get to be of the age of thirtyfive or forty, depending of course upon the locality in which you are living, and you will find that there is a small proportion of people coming to you at that age of life who still have tonsils. Now, if they have not tonsils, there must have been some reason for removing them. So if you see a child five or six or eight or ten or twelve years old with enlarged tonsils, the question is whether to wait until that child has trouble or whether to take out the tonsils then. If the majority of people have trouble before they are forty years old, say, and have their tonsils taken out, why wait until forty? Or, to put it in the terms of a doctor who is seeing a large number of children in not a so-called fashionable school but a school where the parents are people with means enough to do anything advisable, he said the children at that school rarely had tonsils when they came. Now, there must have been some reason for removing them.

With regard to the hearing test, most cases of deafness can be cured if taken early in life; I should say from seventy to eighty per cent. I think we specialists should test out every case with our audiometer before we discharge the patient. We find in some of these cases, at least, there is a certain amount of loss of hearing that has taken place as the result of an otitis—loss of hearing after the discharge has ceased that will, with a little care, get well.

Dr. J. L. Sanders, Greenville: In regard to the inspection of tonsils to decide whether they should be removed, or not, I have never seen this written but in my own experience two landmarks are the most dependable I have been able to arrive at. It is not always the size of the tonsil that is the most important indication, but if you inspect the tonsil with a chronic infection you will find a little red ring around the pillar which fades off into the pharynx and the roof of the mouth. Next in importance is the appearance of the crypts. If they are narrowed and give the tonsil a smooth appearance, in a child or in an adult, you will find when the tonsils are removed they are filled with pus; they will not drain. It has been my experience that when you see in an adult the smooth type of tonsils, where the crypts are sclerosed, that is the rheumatic type. In a great percentage of these patients (I shall not say a hundred per cent., but nearly that) if you press the tonsil and the crypts will not open, you can say there is the cause of the patient's rheumatism. Often after removing such tonsils you can squeeze out pure pus.

SYPHILIS OF THE STOMACH—Report of Three Cases*

By J. G. Murray, M. D., Greenville, S. C.

Eusterman of the Mayo clinic states that 87% of all cases of late syphilis in his large series, came in with a chief complaint of stomach trouble, such as gnawing pain, feeling of fullness, nausea, and occasional vomiting. Stokes and Brown have recently reported a very interesting study of two hundred cases of syphilitic patients whose chief complaint was stomach trouble. Thus we see that gastric symptoms associated with late constitutional syphilis is a very frequent occurrence. True gastric syphilis, however, with a demonstrable pathologic deformity of the stomach wall, is considered of rare incidence. Up to recent years good clinicians still doubted syphilis of the stomach as an entity. It was a point of heated dispute whether an anatomical or pathological picture of gastric lues ever occurred. In 1801 Chiari published a classical contribution on the subject in which he accepts as authoritative cases, only eight of those hither-

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to reported in medical literature. It was in 1916 that Symmers, pathologist at Bellevue Hospital, reported only one case of gastric syphilis in 314 autopsies done on syphilitics. McNeil in an analysis of 1200 cases of syphilis, found only three which were of the true stomach type. Hartwell states that there are approximately two hundred cases reported in literature, but both he and White believe that many of these cases are not true syphilis of the stomach. Only two cases are on record in which the spirocheta pallida was identified in a section of the lesion; namely, in a case reported by Warthin from an excised ulcer, and one from McNee from tumor mass at autopsy.

Careful and conservative investigators however, have been more bold in recent years in making the diagnosis. No less authorities than Stokes and Brown in their series of two hundred cases of syphilis, found eight of definite gastric syphilis. Brougsch and Schnieder found three in 106 cases of syphilis. Up to 1918 Eusterman and Carmen had found sixty four cases at the Mayo clinic. Frank Smithies of Chicago in an examination of 1760 gastric

cases in which the disorder was associated with demonstrable pathology in the stomach, found that two per cent were definitely luetic as compared with 17% cancer and 18.2% ulcer. From these and other corroborative statistics it may be estimated in the light of our present information that gastric syphilis occurs in two to four percent of all cases of late syphilis.

The diagnosis is confusing and difficult. It is made so because of the wide variance of opinion as to what group of findings are to be accepted as sufficiently conclusive to make a diagnosis of syphilis of the stomach. The more liberals are satisfied to base their diagnosis on demonstrable pathology in the stomach wall, associated with a positive Wassermann. The extreme conservatives will not admit on a diagnosis unless an actual section be made from the lesion and pronounced gummatous by the pathologist.

The average age of the condition is thirtyfive years in contrast to the average ulcer age of forty-five years and the average cancer age of fifty-five years. The average duration of symptoms is two years and the course is progressive as distinguished from intermittent. There is a preservation of appetite differing from the anorexia of cancer, and the patient appears undernourished but not cachetic. The condition is better than the lesion, if cancer, would lead one to expect. There is pain in the epigastrium of a dull gnawing character, relieved by vomiting. A sense of fullness or bursting, ability to eat only small amounts, all point to low capacity of the stomach. Gastric analysis reveals either achylia, achlorhydria, or subacidity. Hemorrhage is infrequent. There should be other evidences of constitutional syphilis, such as skin lesions, post cervical and epitrochlear glandular enlargement. Changes in the knee jerks and pupillary reflexes may, or may not occur.

Serologic examination is of course very valuable, and a diagnosis of gastric lues should not be made without a positive blood Wassermann. Stokes however reports forty cases with a definite diagnosis, three of which did not have a positive Wassermann. An interesting observation is the remarkable immunity of the nervous system in visceral syphilis, only two cases in a series of twenty with positive blood

Wassermann showed a positive spinal fluid Wassermann.

X-ray study affords valuable assistance in the diagnosis. There should be a definite filling defect of gastric outline, usually without a corresponding palpable mass. The picture varies on whether it be a gummatous infiltration into the stomach wall or a gummatous ulcer or an extensive fibrosis, and may present an hourglass stomach or the lower loculus may be tubular. The most usual filling defect is similar to that of carcinoma, and a smaller but definite group gives the picture of a penetrating ulcer, but there is usually not the presence of the typical niche, accessory pocket or incisura, classical signs or the simple gastric ulcer.

Whenever it is possible or advisable, it is interesting and more conclusive to obtain a section of the lesion for microscopic study of the gummatous tissue. Finally if there is a question of gastric syphilis or carcinoma, there is the therapeutic test; that is, the administration of specific treatment. If the case in question be cancer there will be no or only slight temporary improvement from the arsenic therapy, while in syphilis there will be progressive and usually rapid symptomatic improvement and some anatomic change.

Thus, I have painted a picture of the classical case of gastric lues. I have not attempted a classification of the different types of lesions found, in order not to cause confusion in so short a discussion. It seems conclusive that a roentgenographic demonstration of a stomach wall tumor or deformity, associated with a reduction of hydrochloric acid and a positive blood Wassermann the diagnosis can be established with reasonable certainty, provided of course, the history and symptoms fit in with the picture.

The treatment of syphilis of the stomach follows for the most part the same regimen as that of any late syphilis, that is the administration of arsphenamine, mercury and iodides. The more recent treatment with bismuth is growing more popular.

The prognosis depends on the extent and duration of the lesion. In the majority of instances the treatment is quite satisfactory and the outlook is favorable. Symptomatic

improvement is noted in practically every case and complete symptomatic recovery in the majority of cases. Anatomic improvement is progressive and complete anatomic recovery can be expected in the early cases. Some of the cases of longer standing and more extensive pathology are less amenable to treatment, though there is always some anatomic improvement. Occasionally there is so much scarring and deformity persisting, after specific treatment, that surgical interference; that is, excision of the scar is necessary to effect a more complete recovery. Out of a large series of cases by Stokes, 30% showed complete recovery, both clinically and anatomically; 41% showed symptomatic recovery with some clearing up of the lesion, while the remaining 20% gave less satisfactory results both symptomatically and roentgenologically.

Conclusions

- 1. The diagnosis of syphilis of the stomach is being more frequently and accurately made because of the X-ray and other modern instruments and laboratory methods of diagnostic precision.
- 2. The treatment in recent years is considered more satisfactory and the outlook more hopeful than was previously conceded.

CASE 1. W. S. Negro man, 36 years old, complaining of gnawing pain in the epigastrium, nausea and occasional vomiting after meals. Symptoms have been progressive over two years and become more servere in past two weeks. Is tender in the epigastrium; No tumor mass palpable. He has considerable epitrochlear and postcervical glandular enlargement. Pupillary and knee reflexes unchanged. Has positive blood and negative spinal fluid Wassermann. Hypochlorhydria X-ray report shows filling defect on the lessor curvature, either gastric lues or carcinoma. Specific treatment was instituted and after eight weeks the patient showed complete clinical and roentgenological recovery.

CASE 2. A. B. G. Negro woman, forty nine years old, had "stomach trouble" about a year. Pain in the epigastrium, vomits after meals. Is poorly nourished but not cachetic. Slightly tender in epigastrium; no tumor masses felt. No glandular enlargement; normal reflexes. Slightly subnormal hydrochoric acid

in stomach. Blood Wassermann was four plus positive.

X-ray shows penetrating ulcer on the lessor curvature at the fundus of stomach, filling defect below this area, suggests that this condition is due to syphilis. Delay in emptying time of stomach. Treatment of Neo-arsphenamine, mercury and bismuth was pushed for six weeks, and the patient was symptomatically well. X-ray report at this time shows stomach entirely negative.

CASE 3. B. W., Negro man, about thirty-five, had four intravenous injections several years ago; has been sick now for eight months. Severe pain over epigastrium, vomits food. Is very tender over epigastrium, some rigidity. Pupils react normally; some epitrochlear and post cervical glandular enlargement. Gastric analysis shows subacidity, some occult blood. Blood Wassermann four plus positive.

X-ray report shows delay in stomach emptying time; filling defect in fundus, greater curvature, either malignant or luetic. Specific treatment was started. Patient more comfortable, stops vomiting, general condition better. Another X-ray after three weeks shows old filling defect has disappeared, but defect on lesser curvature that of penetrating ulcer or broken down gumma. Patient was then operated on for suspected cancer of stomach and area on lesser curvature excised. The tumor. Section taken and sent to laboratory. Not malignant.

X-ray examination was again done about two weeks later and the penetrating ulcer still persisted. Second operation was then done and area on lesser curvature excised. The patient was soon thereafter dismissed symptomatically well and a later X-ray showed complete roentgenographic recovery.

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DISCUSSION

Dr. George R. Wilkinson, Greenville: There are one or two points I should like to make about these cases. The first is that they all occurred in negroes. I have never had the opportunity of seeing a case of what I thought to be syphilis of the stomach in a white person; they have all been negroes. Besides these cases, there have been three other cases in the city hospital of Greenville of what we thought was syphilis of the stomach, all charity cases and all negroes. All of the cases were negro women, and I have been impressed with the fact that this seems to occur in negro women rather than in men. The ordinary type of gastric ulcer occurs in men and in the masculine type of women, while syphilis of the stomach occurs in women and in the feminine type of men. In trying to make a diagnosis while the patient is alive and the tissue is not under the microscope we are always subject to error. The criterion I feel we should have is, of course, that the patient should have demonstrable syphilis. Serologically he ought to have a four plus, anyway. If he has other symptoms, all right; but he certainly must have a four-plus Wassermann. The next thing is pain. I have seen lots of carcinomata that were far advanced, looking at it from the x-ray standpoint, that had no pain. But these patients all had pain. Three of them had such pain that they had to have morphine through their treatment. The next point is a palpable mass that disappears under treatment. When you feel a mass and after treatment you can not feel the mass any more and the patient is symptomatically relieved and you can not see any anatomical change, I think unquestionably the patient has syphilis of the stomach. When you do not feel a mass I have some doubts about its being syphilis. I had a negro woman working for me, cooking. She had severe pain in her stomach. She did not call me but called the city physician; and the first time I knew she was sick was when I saw her in the hospital, where I was on the visiting service. She was suffering excruciating pain. She told me she had been having morphia; I don't know where she got it. She had an hour-glass stomach that you could see through her thin abdomen; you could see the mass there. After treatment she is still living, after four years, and is symptomatically well. She is now doing my washing. I think there is no doubt that these patients can be cured.

Dr. G. T. Tyler, Jr., Greenville: Mills has very well said that the diagnosis of syphilis of the stomach is not so difficult to make as it is to defend. When such an authority as Turnbull of the London Pathological Institute reports from 13,000 autopsies and over 700 resected stomach specimens, when he and his associates were especially alert for the discovery of syphilis, that they could find only one case and even that was questionable, it makes one hesitate in making the diagnosis of gastric syphilis. Yet when we see other reports, especially the x-ray examinations or pictures very carefully studied, we wonder whether that conservative attitude is the correct one. Dr. Meyer, of the Post-Graduate Hospital in New York, says that of 18,000 gastrointestinal examinations he was able to make the x-ray diagnosis of syphilis of the stomach in only five cases. Erdman and Heyd, of the same hospital, in three years, during a very active service in surgery, found only three cases which they could say were gastric syphilis. Hartwell has reported one case which he thought was syphilis; but, because of the report from the pathological laboratory, he concluded that it could not be called syphilis.

There is one prominent characteristic in the microscopic examination of the tissue—the enormous thickening of the submucosa. It eventually cuts off the blood supply. Hence there is sloughing of the mucous membrane and of the deeper tissues until the muscle coat is reached.

Clinically many errors are possible. If we mistake by calling the condition syphilis, and it proves to be cancer, then treatment may be too late. On the other hand, with ulcer, delay is not dangerous. If specific therapy does not relieve, it can be replaced by ulcer therapy; later, if necessary, the patient can be operated upon. I think that so far as the surgeon is concerned the most important thing is to distinguish between syphilis of the stomach and cancer.

Besides symptoms of obstruction (and these are in the late cases), there is one other symptom for which operation may be invoked—pain. In the third case which Dr. Murray showed, you

recall that there was a filling defect on the lesser curvature. This patient suffered a great deal, in spite of specific therapy. I feel that operation was justified to relieve that pain. In the tissue removed, all layers were thickened. No spirochetes were found. In McNee's case eight blocks of tissue were made; in only one were spirochetes found. My patient is able to work. He has symptoms, due, I think, to neglect of treatment. His Wassermann, four plus on admission, became negative; now it is three plus.

Dr. George H. Bunch, Columbia: I have two cases that I have operated upon that I believe to be syphilis of the stomach, though I have positive proof in neither. The first was a young married colored girl who came into the hospital in a state of acute starvation, almost in extremis from pyloric obstruction. We did a posterior gastro-enterostomy. She had a fourplus Wassermann, and I feel sure it was syphilis. She got well on treatment and so far as I know is still well. The second case is one of entirely different symptomatology. This is a white woman, a school teacher, married, with two children in good health. She was in good health until one day she went to carry a load of wood and had, without any pain whatsoever, a massive gastric hemorrhage. She came to a Columbia hospital and was treated there for some days and x-ray studies made. The x-ray showed a tumor attached to the lesser curvature of the posterior gastric wall. This tumor could be moved about, and in a series all pictures showed this filling defect. Manual manipulation failed to replace it. We excised the tumor transgastrically and removed the pedicle and its attachment to the posterior gastric wall. The patient did nicely and got well. She had a negative Wassermann. There was involvement of the glands of the upper abdomen. She is still living and teaching. I have a report here on the pathology which I shall read:

"August 16, 1926.

"Tissue report: This report concerns the histopathology of a solitary globular tumor of the stomach wall—nonulcerating, noninfiltrating, and nonadherent. Fresh preparations taken at the time of removal of the tumor were reported as colloid cancer. In the light of the extended later study this diagnosis was in error. This colloid material observed is fibrin and not colloid. The tumor is entirely confined to the muscularis of the stomach wall; and, while extended effort to stain spirochetae has been unsuccessful, the diagnosis of tertiary syphilis (Gumma) is offered as firm opinion. The tissue is still the object of study.

Wayne W. Bissell, M. D., Pathologist, Columbia Hospital."

Dr. F. D. Rodgers, Columbia: I have looked at a good many stomachs with x-ray and have seen five cases that I diagnosed syphilis of the stomach. Three of them were cancer. I have never seen a condition in a negro that simulated syphilis of the stomach. In one Baptist minister I found what I thought was a characteristic syphilis of the stomach, a regular leather-bottle stomach—not the leather-bottle stomach of lienitis plastica but the leather-bottle stomach of syphilis, with a thick stomach wall that could be palpated through the abdominal wall. only thing that the x-ray man is liable to confuse with syphilis of the stomach is carcinoma. The only case I saw'up there with perforating ulcer was perforating ulcer of the stomach with four-plus Wassermann. As evidence of that, the ulcer did not get well under antisyphilitic treatment. If it had been a syphilitic ulcer it would have gotten well on antisyphilitic treatment, as we know they will. When you see these patients with pain in the epigastrium, with fourplus Wassermann, with persistent pain, pain that is severe, then you have to think of a gastric crisis, and a gastric crisis in a patient with fourplus Wassermann is tabes dorsalis and not gastric syphilis.

Dr. Murray showed another picture with a defect about that wide, with what appeared to me a normal peristaltic wave. The filling defect could have been caused by one of two things. As you know, the stomach is a moving organ, and when you go to record your impressions on a plate you have to do it quickly. Very often there is what appears to be a filling defect when the stomach is perfectly normal, due to movement of the stomach. I have seen as many as five peristaltic waves, giving the stomach a serrated appearance.

Syphilis of the stomach is a very rare thing. The only thing it may be confused with is carcinoma, perforating ulcer, and lesions of that type are not syphilis. A pedunculated tumor is not syphilis; you never saw a pedunculated gumma in your life. Now, Dr. Bunch's first case was probably not syphilis of the stomach either. It is a rare disease, gentlemen. When you make a diagnosis of syphilis of the stomach it is like making a diagnosis of tuberculosis of the lung; you must have the tubercle bacilli; in syphilis of the stomach, the spirochete pallida. If you have a tumor in the stomach which is inoperable and you give that patient antisyphilitic treatment and that mass recedes, then you probably have had syphilis of the stomach. But unless you do have a cancerous-appearing mass that clears up after antisyphiltic treatment, then it is probably not syphilis.

Dr. Julius H. Taylor, Columbia: I do not desire to discuss the paper but wish to congratulate

Dr. Rodgers upon his discussion. He may be wrong, but the whole spirit of it is splendid. Conclusions drawn in the absence of adequate evidence, or faulty premises, have no place in a scientific meeting such as this, and where such conditions obtain or even appear to obtain attention should be directed to it at once. No earnest seeker after the truth could take exception to such action.

Dr. George Fleming McInnes, Charleston: I have seen some of these cases that have had the abdomen opened for inoperable cancer and closed and that cleared up on antisyphilitic treatment. Two of them were white men. In one of them the growth had extended into the surrounding glands.

Coming down to making a diagnosis on filling defects, it can not be made from one film. The stomach, as Dr. Rodgers states, has a very bad habit of having lots of filling defects. If they are not persistent on several examinations I should not call them filling defects.

Dr. F. M. Durham, Columbia: In the case of the colored woman just reported by Dr. Bunch, I wish to state that I referred her to him for an immediate gastro-enterostomy to prevent an acute starvation. After operation she gave a positive Wassermann and some enlarged lymphatic glands were found. She was given antisyphilitic treatment, and she is now enjoying good health.

I wish now to report a case which I found in a locomotive fireman who consulted me five or

six years ago. This man sent for me because he had been vomiting more or less continuously over a period of a month or more. On my first visit I thoroughly washed out his stomach; and, as everything indicated advanced cancer of the stomach, I advised him to see a surgeon at once. He replied that the stomach wash had made him feel so much better that he would wait a while. As a regular routine I had a Wassermann done, and it gave a positive report. After this I called on him and advised him that his condition was syphilitic and not cancerous. He was then placed on intensive antisyphilitic treatment, but in spite of this the Wassermann always came back positive. I advised him to seek a surgeon, as the Wassermann could not be made negative. Dr. Taylor opened him up and found an inoperable gastric carcinoma. I am of the opinion that this was a case of syphilitic gumma with carcinoma grafted upon it.

Dr. Murray, closing the discussion: I was aware when I presented this subject that it would arouse quite a good deal of discussion. I realize, of course, that if we are not very guarded in our diagnosis and examinations we are very apt to frequently diagnose cancer, ulcer, and other conditions as syphilis of the stomach; but I do believe that occasionally (I shall not say frequently, but occasionally) we do err in the other direction.

I have enjoyed the discussion very much and am particularly grateful to Dr. Bunch for reporting his cases.

PEDIATRICS

R. M. POLLITZER, M. D., GREENVILLE, S. C.

In a fairly recent survey of a large number of American school children it was found that at least 25% showed definite evidence of malnutrition. Ever since the epoch making work of W. R. P. Emerson of Boston (Nutrition. and Growth in Children; D. Appleton & Co., 1922) the importance of the subject has been apparent. Others, notably Charles Hendee Smith and Richard Smith, have corroborated his findings in various parts of the country. There now can be no question but that a great many children are underweight. A young child who is 10% below the proper weight for his height (not age) is struggling under a serious handicap, and yet we doctors not infrequently see deficiencies as high as 15 and even 25%. During the past week a child of 21 months came to my attention who was 33% under weight for that age. In most instances unless the individual is incapaciated by some acute illness the matter does not reach the physician. The parents unconscious of the malnutrition content themselves by thinking or saying that none of the family is heavy or that in time the little one will get all right. Heredity, while to some extent a factor, is too often made the scapegoat for carelessness or laziness. But is all this due to heredity? Does time remedy all defects? To each of these we must answer, most assuredly no. During the time of waiting, and perhaps hoping, quite often irreparable injury is done. Anemia and bad posture are common effects. It has been my experience and that of others that with rare exceptions the children who are malnourished are brought in solely because of some temporary illness. On close questioning it is admitted that the malnutrition has been existent for some time and that the signs and symptoms have forced themselves upon the attendants. schools as have a proper system of medical examination, the symptom-complex is easily noted and the parents advised of its presence. However before school takes the child out of

the home the child is attacked. The preschool child is especially vulnerable; for there is a rather general feeling that after 3 or 4 years of age very little supervision is necessary. Then too by that time another baby has come along claiming the time and attention of the mother upon whom most often the actual rearing falls. Were people accustomed to entrust some of the burden and responsibility in connection with puericulture to the doctor more might be accomplished for this "neglected age."

But even so, how many doctors and more particularly how many right here throughout this state take the time to thoroughl go over a child who is merely under weight? If he is able to be up and about he is generaly considered well enough to let alone. But granting that a physical examination has been made; how many of us fully discuss the dietary requirements and outline the hygienic routine? Indeed this attention to a so-called minor ailment, all this time squandered on trivialities, seems ridiculous or silly to a man whose chief interest lies in urology, in obstetrics or perhaps general surgery. But is it ridiculous? It may be trite to remark that "Civilization advances on the feet of little children." Nevertheless it is true. We all admit that a sound mind in a sound body are desiderata. "While the former is the glory of the latter the latter is indispensable to the former." Without good health all else is of little value. This should be the child's right. And those entrusted with his care at home and at school are lacking in their duty if all proper measures are not carried out to maintain them. In many sections throughout the country during the past two decades marked advances have been made in the care of, and attention to children while at school; but at home and in doctors offices generally, there is still a decided lagging.

Once malnutrition with its attendant ills has made headway, the treatment and cure requires much time and hard work. There-

fore it is but the part of wisdom that the parents and the doctors in greater numbers should take time and expend some effort in the prevention of this common and important ailment of childhood.

INTERNAL MEDICINE

J. H. Cannon, M. D., F. A. C. P., Charleston, S. C.

BULLETIN OF THE AMERICAN HEART ASSOCIATION, JULY, 1928

This issue of the American Heart Association carries a brief account of the New York State annual meeting held at Albany, May 21st. to 24th.; and interest shown in heart disease by that organization. Points stressed in the report are as follows:

A combined meeting of the sections on Medicine and Public Health was devoted entirely to a program of Heart Disease. They state that the dominant thought expressed in all papers read was the importance of a complete diagnosis which would include the etiology of every case.

A final report of the committee to make a a comprehensive report covering one hundred fifty-four (154) printed pages after studying the situation eighteen months.

All recommendations of the committee were approved, among which were the following:

Certain changes in Cardiac diagnosis in the international list of causes of death and a recommendation that death certificates specify the etiology of heart disease in cardiac deaths.

With the hope of establishing a common language and view point, the committee recommended that the nomenclature for cardiac diagnosis as adopted by American Heart Association and Criteria for clinical diagnosis as prepared by the Heart Committee by New York Tuberculosis and Health Association be used. Pathological Criteria for use in the study of post-mortem material are also presented by the committee.

The scientific exhibit of the meeting was devoted exclusively to heart disease and by means of posters and charts illustrated mortal-

ity, morbidity, etiology, diagnosis, organized care and therapy.

Electrocardiograms with descriptive legends, prepared by Dr. Alfred E. Cohen of the Rockefeller Institute illustrated nearly every type of irregularity and condiction defect.

Dr. Douglas Symmers and Dr. Jno. Wycoff exhibited one hundred forty (140) gross pathological specimens and forty (40) photographs from the Pathological Laboratories of Bellevue Hospital and the third Medical Division of Bellevue. They were arranged so as to illustrate the various types of heart and aortic disease. Attached to each specimen was an abstract of the pathological findings and clinical history of the case.

Mt. Sinai Hospital, through the courtesy of Dr. Louis Gross, loaned two injected specimens demonstrating the blood supply to heart muscle and valves.

The program of the final day was devoted exclusively to illustrated lectures on heart disease. Dr. E. Libmon showed a series of films illustrating the outstanding lesions of subacute bacterial endocarditis.

Latern slide demonstration of micro-photographic studies included:

Cardio-vascular lesions in rheumatism by Dr. W. C. Von Glahn;

The blood vessels in heart valves and their relation to endocarditis by Dr. Louis Gross;

The relation of Coronary circulation to heart disease by Dr. Jos. T. Wearn;

Finally, Cinematographic studies of heart block by Dr. Samuel W. Lambert; of Heart Valves in action by Dr. Robt. H. Halsey and of Cells Cultivated in Vitro by Drs. Albert H. Ebling and Alexis Carrel.

Such a program bears testimony to the enthusiasm of our confreres in the Empire State in attacking the problem of heart disease in such

a comprehensive manner and attempting to devise a plan whereby all workers will use similar standards and looking toward bringing order and understanding where in many cases there now prevails a variable terminology and no uniform criteria for diagnosis, etc.

Just what South Carolina should do about heart disease deserves careful thought by every member of this association.

EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

THE HISTOPATHOLOGY OF MASTOIDITIS

By J. P. Steward, M. D., F. R. C. S.

Development of the Mastoid Process

The mastoid process is developed from two bones; the anterior part is derived from the squamous, and the posterior part from the petrous portion of the temporal bone. Between these two bones there is the mastoid fissure which forms the site of predilection of a fistula. The lateral wall of the mastoid bone often contains, in its early stages islets of cartilage which facilitate fistulous formations.

The squamous portion develops directly from membrane to bone, the petrous part from the membrane to cartilage, and thence to bone. Absence of the tympanic antrum has been described, but is rare. The mastoid process only takes shape from the beginning of the second year onwards. It develops in response to static conditions associated with the neck muscles, to which it gives attachment. The period of its greatest growth is at puberty.

Pneumatization of the Mastoid Process Eckert-Mobius divided the development of * the development of the mastoid process into three periods.

The first is the development of the lumen of the recessus and antrum, which takes place during the first years of life.

The second period is the development of the pneumatic cells which normally takes place during the second and third year of life, at latest the end of the fourth year. If, after the fifth year an incomplete pneumatized process is present, disturbance of the pneumatization has occurred. As the Eustachian tube is responsible for the ventilation of the middle-

car cleft, and therefore plays a very important rule in the pneumatization of the mastoid process, adenoids, if present, should be removed before this age.

The Eustachian tube is responsible for the ventilation of the middle ear spaces and should therefore be kept open, i. e., free from adenoid tissues. The air pressure plays a great part in the development of the middle ear recessus and antrum and the pneumatization of the mastoid.

During foetal life a double row of ciliated columnar epithelial cells buds from the nasopharyngcal mucous membrane, and by active growth, aided no doubt by intrauterine pressure, hollows out and lines the Eustachian tube. At birth, when breathing begins, pressure is produced by the tubes of swallowing, which forces air into the Eustachian tube, which in turn forces the spreading epithelium into the middle ear and its spaces.

External to the antrum the tissues are:

1st. Pressed upon by the engrowing epithelial sac, causing

2nd. Collateral edema, whereby the

3rd. Parenchymatous elements of the bonemarrow atrophies, leaving only its framework of endosteal tissue, this

4th. Endosteal tissue becomes myzemateus and is later

5th Transformed into loose fibrous tissue, which then

6th Becomes pressed into a very thin layer on the esseous trabeculae.

7th. The cell thus formed is lined by a single layer of flattened epithelium.

8th. The bony walls of the cells are widened by osteoclasts or by perferating vessels.

The process of pneumatization is as follows: These narrow spaces which open towards the antrum are pressed upon by the ingrowing epithelia sac.

The third period of development is the further distribution of the pneumatic cells in later life.

The pneumatic cells diverge into the marginal zones and neighboring compact bone, e. g., into the abyrinthine capsule; the process takes place by the development of small marginal medullary spaces

In a perfectly pneumatized, mastoid process the cells are regular and laid down in definite arrangements; thus we can distinguish the various cell groups which are constant. The following anatemical grouping of the cells is according to Neumann:

1. Zygomatic cells. 2. Cells bordering the floor of the middle fossa. 3. Angle or petresal cells. 4. Marginal cells, lying posterior to the sigmoid sinus plate. 5. Cells overlying the sinus plate. 6. Retrefacial cells, including these cells lying behind the horizontal cemicircular canal. 7. Tip cells. 8. Very rarely, cells in the bony part of the Eustachian tube, peritubal cells.

The cortex of a well-pneumatized mastoid process is of thin compact bone, while the blood spaces in the bone throughout it are few.

Arrested Pneumatization

The normal development of the mastoid air cells may be interfered with at any stage by the presence and effects of local inflammation. Whittmack, in his extensive researches gives valuable information on this point. In the presence of disease new connective tissue is formed beneath the epithelial layer of the advancing sac. Consequently, adhesions are formed and growth of new bone takes place encapsulating the antrum from the spongy mastoid; thus, by a mechanical process, further pneumatization is prevented. The adhesions form loculi in which the inflammatory process may continue, although in a quiescent form, while the affected mucous membrane may be left in state of chronic phlegmasia.

The Lining of the Pneumatic Cells

The recent researches of Krainz leave no doubt as to the structure of the lining membrane of the air cells.

As the epithelium grows in more deeply, it tends to lose its ciliated character, so that finally

only the Eustachian tube and anterior part of the tympanum are lined by ciliated epithelium; the epithelium of the mastoid cells, on the other hand, is flattened, structurally resembling endothelium, the intermediate parts being lined by epithelium, of the various types transitional between the two extremes.

This characteristic of the epithelium is analogous to that of the main respiratory tract; in the trachea it is ciliated, and in the air cells or alveoli it is flattened and has often been likened to a sereus membrane.

Thus the structural lining of the mastoid air cells consists of an external, single layer of flattened epithelium with its basement membrane lying directly on the substratum of residual endothetial tissue, it is devoid of sensory nerves and glands, and is closely applied to the underlying bone. It is yellow in color from the underlying bone, but during acute disease it becomes red through the dilation of the endosteal vessels.

Edema ex Vacuo

Air plays a very important role in the absorption of exudate from the middle-ear spaces, and its exclusion and absorption render the individual more liable to disease. This is well seen in children, in whom the air content of the middle-ear cleft is very small, and in the incompletely pneumatized mastoids, in which, on exclusion, air is more quickly resorbed; on the other hand, a well pneumatized mastoid process containing more air than the antrum and middle ear becomes infected less frequently, but when infection occurs it is more dangerous, owing to the comparatively few blood-vessels.

When the blockade of the Eustachian tube or of a group of cells occurs, an edema ex vacuo results. The mucoendosteum, which normally is pressed flat against the bony wall of the cell, expands to many times its original thickness the endosteum is spread out into a looser or thicker network, according to whether it is healthy or whether it has been the seat of previous infection. Owing to the decreased tension of the supporting tissues, the vessels dilate and extravasation of plasma occurs.

The patency of the Eastachian tube to the passage of air has a bearing therefore on the course of the disease, in ventilating the cavities and so favoring re-absorption. That is where

some find removal of adenoids to check the progress of a mastoid infection.

Changes in the Muco-Endosteum

Under the stimulus of an irritant, hyperemia and resulting transudation of fluid into the soft tissues are produced, whereby the lining of the pneumatic cell becomes swollen and thickened. The swelling may be so great that the muco-endosteum becomes eighty times its original thickness. This swelling is due principally to back pressure and consequent transudation from the vessels in the neighboring Haversian systems, and the edema ex vacuo is only of minor degree.

Thus, as in other tissues of the body, the initial stage of mastoiditis is an increased bloodpressure. The Haversian canals are rigid, bony tubes and the vessels in them feel the effects of the increased pressure, first. A certain degree of liberation of pressure can be obtained through the medium of the lining of the pneumatic cell, and up to a certain point this acts as a safety valve; but pressure soon manifests itself by the presence of esteoclasts. Even three days after the onset of the inflammatory process, the effects of pressure may be plainly seen.

The fibrous tissue in the endosteum can therefore contain considerable edema in its meshes. In the completely pneumatized mastoid the fibrous tissue cannot expand to contain the same amount of fluid.

The capillaries in the muco-endesteum become engorged and, by active budding, new ones are formed. The lumen of the air cell contains at first a serous and later a purulent cellular exudate. The inflamed muco-endosteal surfaces may meet, thus occluding the osteum of the cell or series of cells; the consequent increase of pressure may be shown by the presence of esteoclastic activity or other phenomena. This constitutes the empyema os Schiebe "the dangerzone" and is a condition seen mostly in the second and third week of the disease. Air cells containing pus not under pressure, Schiebe designates "simple cell suppuration." This condition may occur for example, in the peripheral smaller mastoid cells.

All the air cells are not affected to the same degree. One cell may be acutely inflammed

while the adjoining cell is only slightly affected. The zone of reaction occupies a greater radius than that of the actual inflammation. Thus an area of advanced destruction is surrounded by one in which constructive processes are occuring. Mastoiditis has come to be considered a sclerosing disease when osteoclasts predominate.

The condition necessary for commencing organization obtain when the exudate becomes "stagnant," less fluid, and fibrinized. At many points, through gaps in the epithelium, young blood-vessels sprout from the muco-endosteum and, together with elegnated fibroblasts, form tissue bridges. The formation of granulation tissues thus proceeds from all sides. The stage of organization at any place can be made out by observing the degree of differentiation reached by the fibroblasts.

The epithelium grows along the tissue bridges, its chief aim being to conserve as much as possible of the original lumen of the air cell. These spaces, from their resemblence to a string of pearls, are designated "pearls." if the "pearl" contains exudate and this is not absorbed, it remains as a true cyst. Lastly, if an attempt is made to organize the exudate in the pearl, the pearl becomes obliterated in the process.

It should be noted that before the pneumatic space can be completely obliterated as such, the epithelium must disappear, by degeneration, and this can quite easily take place.

Once the epithelium is destroyed, the power of resorption is lost.

It must not be forgotten that this process of organization is one of proliferations of edosteal tissue, that is, of potential bone-forming tissue; new bone formation, therefore, is one of the most striking structural features of the disease.

Bone Removal

There are three methods by which bone may be removed. 1. Halisteresis. 2. Osteoclasts, and 3. Perforating blood vessels.

1. Halisteresis signifies a decalcification of bone through the agency of bone fluids.

The vitality of the cells becomes affected and consequently the bone under their immediate control loses vitality and becomes more vulnerable to the attacks of the absorbing processes.

Halisteresis takes place early and is confined

to the first ten days of the disease. The absorption of mineral salts softens the bone; its tissue components are then removed by osteoclasts or by perferated blood-vessels. 2 The removal of bone by osteoclasts is so common a phenomenon that a brief description will suffice.

Osteoclasts are not specific formations, but are commonly formed by the fusion of endothelial cells.

The activity of the osteoclast is not to be measured by the number of its nuclei, but by the surface relation which these bear to the total volume of the cytoplasm.

The action of the osteoclast appears to be biochemical. "Oxidation in such a tissue is rapid and a large amount of carbon dioxide is given off by it."

Carbon dioxide is the great solvent of lime salts within the body. The solution of bone is therefore rapidly effected in the immediate vicinity of the osteoclasts.

3. The third method of bone removal is by perforating the blood-vessels, which come in through epithelial gaps.

Necrosis

Necrosis in genuine cases of mastoidits is very rare. When present, necrosis generally occurs in cases of mastoiditis complicating a systemic wasting disease, such as: diabetes, tuberculosis, etc., and in such, is found in the very young or in old age.

Fistula

Fistula, the site of predilection, forms at the squame-mastoid suture, also at the site of islets of cartilages that are found in the lateral wall in early life.

Fistulas form only when peripheral pneumatic cells are present, that is, when they are in close proximity to a free surface, either cortex or cranium. When the natural paths for drainage become occluded either by osteoclastic changes or by a plug of granulation tissue, the pus in a cell or collection of cells which have been converted into one common cavity cannot escape. Consequently pressure conditions are much more acute and, following the line of least resistence, an outlet to the surface is excavated and the pus escapes under the periosteum or dura mater. Pressure causes vascular anemia and the anemia leads to the soften-

ing of and removal of the bony trabeculae. Fistula never lead from the antrum and the cells immediately adjacent. Apart infants, where an obstruction to the aditus ad antrum may take place, there can be no retention of pus in the antrum and the cells immediately adjacent to it; this is due to free drainage into the middle ear and thence through a perferation in the tympanic membrane, if present, or by the Eustachian tube, hence fistula from these air cells never occur. When obstruction to drainage through an open membrane tympani occurs one frequently finds a fistula externally or intracranially to develope, hence the urgency of immediate opening of the mastoid in cases of sudden cessation of discharge from the external auditory canal.

Macrosopically, the fistula is often filled with granulation tissue; microscopically, its edges are deeply eroded by active osteoclasts—indicating a persistence of the pressure—and the lumen is filled with proliferation endosteum.

New Bone Formation

New bone may be laid down in lamellar formation (apposition bone) or in reticular formation.

A special enzyme in bone brings about an orderly precipitation of the calcium salts of the blood within newly formed bone matrix.

Lamellar Bone—The real osteoblasts arrange themselves in one or more rows along the original margin of the bone; there they secret osseomucin, and becoming embedded in this are converted into bone corpuscles. Calcium salts are then deposited.

Recticular Bone—As already stated, this is an embryonic type of bony formation and is analogous to bone developed in membrane.

- t. The first sign of new bone formation is a grouping of the osteogenic fibre bundles.
- 2. Active osteoblasts are found around the fibre bundles and within their meshes.
- 3. The secretion of osseomucin occurs and the bundle becomes a hemegeneous mass.

By the general laws of development, imperfect forms are gradually replaced by those more perfect, so that the trabeculae become transformed into lamellar bone.

The formation of recticular bone is a response by the organism to the great stimulus of the disease; apposition bone cannot be formed quickly enough, therefore the more quickgrowing and primitive type is produced.

Bacteriology

Bezold maintains that the kind of microorganism has no influence on the liability of the bone to be affected or on the subsequent course of the disease, but this statement must be modified in the light of present knowledge; probably Gradenige' dictum that the clinical symptoms are not in direct relationship to the kind of micro-organism would be more correct.

The streptococcus haemolyticus is the most dangerous micro-organism as regards intracranial complication and is frequently found in influenza.

The pus from a case of acute mastoiditis is ordorless; its consistency depends upon the infecting micro-organism and has an important bearing, therefore, on:

- a. The drainage or stagnation, and
- b. Subsequent organization. Streptococcus mucosus gives a thick, glairy pus, which is apt to be retained and "stagnate;" further, the quiet course of the disease also favors retention of the pus. In contrast to this is the violent, profuse, pulsating discharge in an acute otitis media due to S. pyogenes.

General Incidence

On account of the osteosclerotic character of the mastoid process in patients over forty years of age, mastoiditis occurs with more difficulty at that age; in sucklings, on the other hand, in consequence of the anatomical structure of the middle-ear spaces and of the delay of spontaneous perforation through the membrane tympani, extension of the inflammation from the middle-ear to the mastoid process is greatly favored.

Clinical Manifestations

The time at which operation was indicated by one or more of the following conditions:

- 1. When the discharge continued for more than five weeks and was pulsating and profuse. If the discharge persists for some time after an acute otitis should ordinarily have cleared up, it is coming from the mastoid cells. In any case it is a generally recognized treatment to drain the middle ear through the mastoid.
- 2. Continuous pain behind the ear; this denotes an involvement of the periosteum and

occurs later than the onset of the mastoiditis, since the inflammatory process extends from within outwards. Pain may be present early, but if not intense it is due to a slight tension in relation to the periosteum and disappears after one or two days when the existing blood pressure becomes adjusted. Late pain, therefore, indicates extension of the infection to the periosteum, internally or externally.

- 3. Sensitiveness to pressure over certain points; a. over the antrum; b. over the posterior border of the mastoid; c. over the posterior border of the tip of the mastoid process. (I saw a group of cases where pus collected in large cells located here.)
- 4. Edema and redness of the external soft parts (erection of auricle) and a superiosteal abscess.
 - 5. Sagging of the posterior meatal wall.
- 6. Throbbing or "beating" noises which do not clear up in two weeks.

Schiebe explains these noises thus: They are worse at night on account of the passive hyperemia due to the low position of the head in bed.

Pus under pressure in any part of the body exhibits this "throbbing" (of Whitlow) and it is one of the most valuable and absolute signs in the diagnosis of emplema. These "beatings" are snychronous with the pulse.

- 7. Intracranial symptoms.
- 8. Continued fever In the adult, an ordinary case of mastoiditis is unaccompained by fever; when fever is present, great care must be taken in the examination. In children, however, fever is not uncommon in the first few days of illness. Alexander gives 101 as the limit for a temperature of an uncomplicated mastoiditis.
- 9. X-ray picture: A negative plate is not reliable and only positive results are to be regarded. Positive results are obtained in only 58 per cent of cases. Positive x-ray reports must be interpreted in the light of whether there has been a previous infection that may have involved the mastoid cells.
- to. Some authorities consider that migraine occurring in a patient in whom discharge from the ear has recently developed, is an indication for operation.

The time to operate. 52 per cent were operated upon in the first three weeks, of these 24 per cent being performed in the second week.

Mastoiditis in Influenza

The genuine influenzal cases are met with in the first days of the disease and are servere. The usual symptoms of acute mastoiditis are very intense and the case often comes to operation early.

Macroscopically, at operation the lining of the pneumatic cells is swollen, dark red or purple in color, and only a small amount of purulent secretion is present. The bone is hard and the tissues bleed readily and profusely. Hemorrhages are so large that they mask the structures.

Discussion

There are two things to be considered in

mastoiditis; First, the inflammation or empeyma of the air-cell itself, secondly, the changes which occurred in the Haversian systems. The first could be seen mascroscopically at operation, but to many clinical otologists the widening of the Haversian systems by osteoclastic formation might be new.

With regard to the density of the mastoid: if an otitis media developed in infancy, new bone processes were formed in the cells around the antrum, hindering the epithelial sac from going further, so that the mastoid bone never became hollowed. He held otitis media responsible for the condition.

SOCIETY REPORTS

ANNUAL MEETING, CHESTERFIELD COUNTY MEDICAL SOCIETY, CHERAW, S. C., FIVE O'CLOCK, NOVEMBER 22, 1928.

5 P. M.

Meeting Called to Order—Dr. R. L. Gardner, Chairman, Chesterfield, S. C.

Invocation—Dr. A. H. McArn, Cheraw, S. C. Welcome—R. A. Rouse, Mayor, Cheraw, S. C. "The Head Cold," Dr. C. W. Kollock, Charleston, S. C.

Discussion, William Egleston, Hartsville, S. C. "Positive and Differential Diagnosis of Exophthalmic Goitre," Dr. Stuart McGuire, Richmond, Va.

Discussion, Dr. F. H. McLeod, Florence, S. C.

7:30 P. M.

Banquet.

8:00 P. M.

"Significance of Heart Murmurs", Dr. J. H. Gibbs, Columbia, S. C.

Discussion, Dr. William Allen, Charlotte, N. C. "Toxemias of Infancy and Childhood," Dr. J. Buren Sidbury, Wilmington, N. C.

Discussion, Dr. D. L. Smith, Spartanburg, S. C.

MINUTES—FLORENCE COUNTY MEDICAL SOCIETY, HELD OCTOBER 2, 1928

The regular meeting of the Florence County Medical Society held Tuesday night, October 2, 1928, at Martins Cafeteria, at 8 P. M., at which time a delightful supper was served. After which the meeting was called to order by Dr. Jas. McLeod, the vice-president in the absence of the president, Dr. E. A. Simmons, who was unavoidably kept away. The minutes of the previous meeting was read and approved. After the transactions of the regular business of the Society, the scientific program was entered into. Our invited guest and speakers for the evening were Drs. D. L. Maguire and O. B. Chamberlin, of Charleston. Dr. Jas. McLeod then presented Dr. D. L. Maguire the first on the program. Dr. Maguire chose as his subject "Surgical Mortality," his paper was very interesting and instructive to all those present, Drs. F. M. McLeod and M. R. Mobley discussed Dr. Maguire's paper, Dr. Maguire then closing the discussion.

Dr. O. B. Chamberlin, next on the program was then introduced, Dr. Chamberlin selected as his subject "Some neurological conditions met by all men in the practice of medicine." Dr. Chamberlin handled this subject in his usual forceful manner, and was thoroughly enjoyed by all present, Dr. Chamberlin's paper was discussed by Drs. Salters, Guyton, and Lide. Dr. Chamberlin closing the discussion, and at the same time answered the questions asked by those in the discussion.

Those present at the meeting were, Drs. F. M. McLeod, Jas. McLeod, L. B. Salters, L. M. Lide, M. R. Mobley, E. E. Herlong, S. R. Lucas, W. E. Hicks, J. F. Davenport, O. T. Finklea, R. E. Lee, C. H. Pate, C. L. Guyton, Brown, Eaddy, McMaster, and Drs. Maguire and Chamberlin.

There being no further business the society was adjourned.

Respectfully submitted, E. E. Herlong, Secretary.

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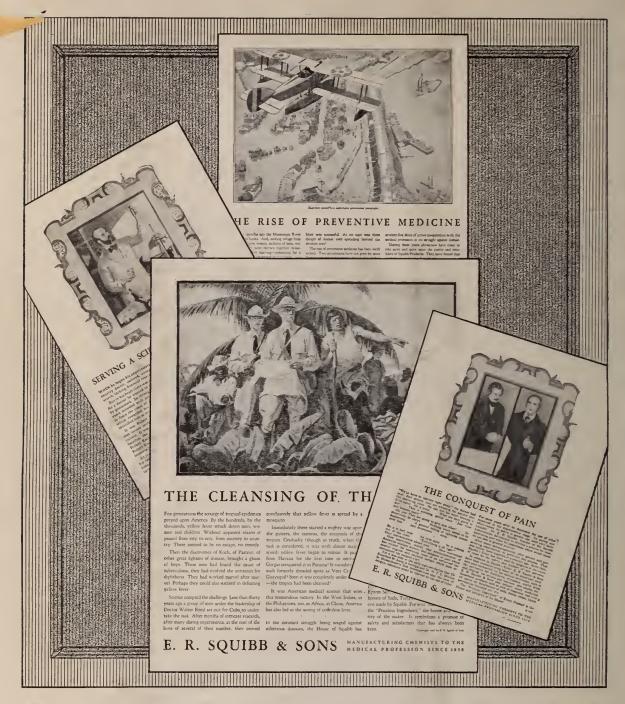
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The Journal

of the

South Carolina Medical Association

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EDITORIAL

RETROSPECT AND THE NEW YEAR

The South Carolina Medical Association and its constituent County and District Societies closes the year with splendid records. The membership has been steadily gaining in recent years, but there is apparent a status quo around eight hundred and fifty members with a possibility of not more than one thousand attainable. Of course there are more doctors in the State approximating thirteen hundred but for various reasons all these probably will never become active members though most of them have at some time or other been allied with organized medicine. A large section of our State has suffered from poor financial returns this year and the doctor is about the first one to feel the pinch of these reverses. Scientifically the State Medical Association has had an optimal year. We have made splendid progress with every hope of continued advances. There are many problems in which our profession is mutually concerned with the larger interests of the profession of the nation, such as: the cost of medical care, the trend of medical education, the scarcity of doctors in rural communities, the inroads of the cults, etc. None of these problems appear to be assuming undue proportions in South Carolina, but they may become so at any time.

As the Old Year goes out and the New Year comes in the Journal is not unmindful of the cordial support of the profession of the State, for in no other way could it be worthy of the serious attention of right thinking men. It is a small but deserving enterprise which can succeed only by the whole hearted cooperation of the entire membership. The Journal, therefore, wishes to express its deep gratitude for the esteem in which it is held and trust that the holiday season may prove to every doctor in South Carolina a highly

enjoyable occasion and out of it may come greater enthusiasm and promising hopes of larger fields of service.

PLANS FOR THE CHARLESTON MEET-ING MATURING. DATE CHANGED

On December 11, President R. E. Hughes, of Laurens, Dr. Hugh Smith, of Greenville, Chairman of the Scientific Committee and the Secretary-Editor met with the local Committee on Arrangements in the city of Charleston and fixed the date as well as made plans for many features of the next meeting. Owing to the great influx of tourists in Charleston during the spring it became necessary to move the date forward, which however, has quite a number of advantages as other States have verified. Early in May Charleston offers unusual attractions for visitors and at this particular time the splendid hotels will be free to give their undivided attention to the demands of the Association. The date has been named May 7, 8 and 9. The Francis Marion Hotel will be Headquarters. There are many other good hotels the names and rates of which will be given later.

The joint meeting of these Committees determined upon several innovations for the 1929 meeting. First of all the papers will be limited to twenty in number. The meeting will be essentially a Clinical Congress so to speak.

Tuesday afternoon of May 7 will be given over entirely to extensive clinics at the Medical College and the hospitals of Charleston. The House of Delegates meeting at night. Wednesday morning the usual customary addresses and papers will begin taking the entire day. On Wednesday night the addresses of distinguished guests following which there will be the President's reception and ball. On Thursday morning an entire half day will be given over to clinics at the Francis Marion Hotel chiefly by invited clinicians from outside the city of Charleston and in the afternoon finishing up of the paper reading program. The scope of entertainments will be simple but ample for the complete satisfaction of everybody concerned. The Woman's Auxiliary of the Charleston Society will have charge of entertaining the ladies and it goes without saying that nothing will be left undone to make the occasion a memorable one for the doctor's wives and daughters. As time goes on more complete details will be published. It is fortunate that nearly five months ahead of the meeting the plans have been so well thought out and crystalized. This gives everyone a chance to decide just how far they will be able to bend their efforts toward the one great purpose of making the eighty first meeting of the South Carolina Medical Association an epoch in the annals of its long history.

ORIGINAL ARTICLES

SECONDARY ANTHRAX OF THE EYE*

By N. T. Clark, M. D., Spartanburg, S. C.

A young boy of good family history, working in a field cultivating cotton hit his hoe against a rock and caused a piece of it to fly into his eye making a very ugly cut across the nasal side of the cornea which left a gaping wound.

Immediately after the accident he was taken several miles to a town where treatment was procured. The treatment consisted of a clean-sing solution of borax solution to be used every three hours. This direction he carried out returning every day to have the same instructions given him.

For a period of three days he did this religiously and consistently; but on the third day he became weak and besides discovered that he was blind in the eye, and so decided to seek other medical advice.

Exactly on the third day after the wound he arrived at my office, weak, blind in the wounded eve, unconcerned in appearance, afflicted with lassitude and malaise, his cheeks flushed, with a loss of appetite but not thirsty. Immediately he was put to bed for full and further observation. On the following morning the injury of the cornea was carefully observed and found to be of peculiar color, a yellow with a tinge of green appearance, the surface being stippled and peculiarly dry, it looked more or less lifeless as the frozen layer of an onion would appear, and this condition enveloped the whole of the cornea. The edges of the wound were a little puckered but no wise thickened. It just looked as if something had merely robbed it of life. The iris was not incarcerated. The deeper structures were beyond observation. The conjunctiva was swollen severely and oedema was in the lids and the surrounding tissue was just a bit enlarged. However there was but little redness anywhere in any place. A line of apparent demarcation seemed to surround the corneal tissue.

There was no function of sight only light projection being present.

Constitutionally his temperature was 99.5, his pulse rate 88, and his respirations were 20. His skin was dry, no intestinal or urinary symptoms, no coated tongue to speak of, no delirium, and no pain, but I never saw a person so weak for the symptoms so mild and time of affliction so short.

An immediate operation was decided for the removal of the eyeball that proper drainage might be established and the absorption of toxins speedily stopped.

The wound during the operation bled practically none. He reacted well from the ether. A loose purse string suture was left in the conjunctiva with a plain gauze dressing bound with a bandage after the socket had been washed with a one to two thousand bichloride of mercury solution.

Many intra and extra cellular gram positive organisms were found at the laboratory and these proved to be Anthrax bacillus. On the third day many lymphocytes were found but no organisms. He seemed much improved. On the fourth day his temperature, pulse rate, and respirations were normal with a return of appetite and a strength of body.

Also on the fourth day the smears showed no return of organisms but no speculation could be evolved as to where he acquired this germ. Many questions were asked and propounded about the vicinity and surrounding upper South Carolina where such a germ had never been known in soil or animal. Then it was decided to examine the contents of a mit that he had received as a prize from some newspaper of a wide circulation. interior filling was found to be infected with Anthrax—as many as three different points being examined. The wool was dirty looking and unsanitary. The boy playing with the mit infected the wound of his eye with the most destructive germ, fast working and uncompromising in effect as it is.

^{*}Read before the South Carolina Medical Association, Columbia. S. C., April 18, 1928.

Now the conclusions one would draw from this case is:

- (1) That the boric solution as used proved to be insufficient to counteract this germ;
- (2) That the germ came from the mit made from the unsanitary wool.
- (3) That the immediate and free drainage was proper
- (4) That the germ was practically limited to the cornea in this instance.
- (5) That the quick action of enucleation was best.
- (6) That the Anthrax bacillus had lived a long time in the mit.
- (7) That the blood vessels and other vessels failed to carry and convey the germ to adjacent and other parts of the body;
 - (8) That the toxins did circulate freely;
- (9) That the pathology of the cornea was peculiar and characteristic of and within itself:
- (10) That contagion was small comparatively speaking with the rapidity of the destruction;
- (11) That destruction was exceedingly rapid:
- (12) That restoration of unremoved adjacent tissue was complete and final:
- (13) That infection of the wound was easily affected and.
- (14) That the numbers of germs in the mit must have been LEGION.

THE INDICATIONS FOR CESAREAN SECTION*

By George E. Thompson, M. D., Inman, S. C.

According to tradition cesarean section was orginally devised to save the life of the child, and in the present day is to be considered from that standpoint in the majority of instances, but its performance is occasionally necessary to safeguard the life of the mother or the lives of both mother and child.

In reaching a decision as to what method of treatment or what proceedure shall be adopted in a given case of obstetrics it is incumbent upon the Physician to consider the immediate permanent results to both mother and child, but it is generally conceded that the mother has a prior right. Since the majority of obstetric cases in our own state receiving medical attention are still in the hands of the general practitioner, it is upon him that the responsibility rests of making this decision.

Cesarean affords a prompt and spectacular termination to a process which otherwise is usually tedious and prolonged, but gives a higher mortality than the average abdominal operation, a mortality rate in the neighborhood of 10% being reported by some of the better operators. Under less favorable circumstances the death rate is much higher. Therefore while many factors influence the mortality rate, we can not undertake the operation without a thought as to its seriousness. Page of Omaha thinks that the low operation gives a higher mortality rate than the abdominal type because most frequently selected for the worst cases.

The primary indication is pelvic obstruction. The first thing thought of as an indication for abdominal delivery is contracted pelvis, but contraction is an elastic term, and I think obstruction is better. When contraction or narrowing is sufficient to be obstruction the indication is absolute.

To paraphrase a famous text, when obstruction is so great that the delivery of a child either living or dead through the natural outlet incurs as great risk to the mother's life as a cesarean, there can be no question or argument as to what proceedure should be adopted a cesarean being indicated regardless of how long the mother has been in labor, or how great the possibilities of internal infection.

Obstruction may be due to many causes congenital or acquired. In reference to the amount of contraction permitting a child to be born, there is a variance of opinion. In a measure this might be explained by the fact that a pelvis contracted for one size child, might not be for another with a smaller head, and a tight pelvis for a head presentation would be a still worse fit on a breech.

DeLee says a conjugate vera of 6 or $6\frac{1}{2}$ cm gives the absolute indication. Harold Bailey says that all pelves with a true conjugate of

^{*}Read before the South Carolina Medical Association in the Symposium on Obstetrics, Columbia, S. C., April 19, 1928.

less than 7 cm are absolutely contracted, and should be delivered by elective section; that cesarean is preferable to general treatment of contracted pelves by the induction of trial labor, and that in case of trial labor of 12 hours of strong pains, without engagement of the head, and vaginal and rectal examinations have not been done, low flap section should be performed in case head is still floating.

Polak thinks that 2 hours of strong pains with a dilated cervix without engagement of the head a sufficient test of labor.

The danger of too long trial labor is Acidosis.

Other absolute indications are obstructive neoplasms, advanced cancer malformations, contractures from old inflammatory conditions or operations, and exostoses.

Rupture of the uterus is best treated by abdominal section, and may necessitate a hysterectomy.

The operation has also been performed to deliver a living child from a dead or dying mother.

Other indications are usually in the interest of the child only, and the man who is doing general practice is apt to discover fewer indications than the man who is doing much surgery, yet each may be honest in his opinions.

In many instances the choice lies between cesarean and some other obstetric operation, and the decision of which operation to perform may depend upon a great many factors, not the least of which may be the skill of the operator, the environment of the patient, and the previous handling of the case. A cesarean requires less skill than other obstetric operations, but the chances of infection are great, and the immediate mortality is not always a fair index to the permant result.

A woman who has once had a cesarean is supposed to be in danger of a ruptured uterus if allowed to proceed in her next confinement without another. Ewer of Oakland says this danger may be dis-regarded in case of a previous operation of the low type.

The danger is lessened too if the woman has previously borne children in a natural way. It should not be forgotten however that

there is a tendency for later children to be larger in size than in the first pregnancy. Dr. Karl N. Wilson says that women who have had cesareans are less apt to become pregnant subsequently. DeLee quotes Holland as saying that subsequent labors that rupture occurred in 4% of cases with a maternal mortality of 30% and foetal mortality of 70%.

Several cases have been reported where women alternated between natural delivery and cesarean.

Some other relative indications are:

Double uterus.

Habitual death of foetus a few weeks after birth.

Prolapse of cord in old primipara with membranes ruptured and cervix not dilated.

Posterior positions with head fixed in upper 1/3 of pelvis.

Dystocia from previous operations.

Abruptic or ablatic placenta previa.

Primipara nearing middle life with over-

whelming chances against normal delivery.

Bandl's ring (so called).

In recent years cesarean has attained considerable popularity in the treatment of eclampsia. While various arguments and statistics have been presented pro and con, the conservative treatment of eclampsia seems to be gaining favor.

Personally I do not think that puerperal eclampsia per se is an indication for suprapubic delivery, but when there are other relative indications present in the same case, such as a long unyielding cervix or a moderately contracted pelvis the operation might be the best treatment. Elcampsia is a condition giving a high mortality rate with any form of treatment, but emptying the uterus does not always stop the convulsions. The woman who is toxic is said to be much more liable to infection. While the anaesthetic may have a favorable influence on the paroxysms.

Spalding says that the non-operative treatment gives best results.

If a cesarean is to be performed, it is better to operate before the time of labor. 'Tis true that labor induces a certain thinning of the uterus, but it also saps the patient's strength.

The advice given by some authorities not to examine the woman digitally has always

seemed to me difficult advice to follow, and I do not think an aseptic examination or an examination as aseptic as possible is a contraindication to suprapubic delivery.

We are frequently called to see patients whom we have never had the opportunity to examine before, and without examination we would in a measure proceed in the dark.

The expectant mother owes it to herself, her Physician, and her un-born child to consult her Physician for examination in the first few months of pregnancy. When that custom becomes more universal, and it is gradually becoming so, we will have fewer obstetrical complications, a lower infant mortality, and lower maternal mortality.

If this symposium accomplishes nothing more than impressing on the mind of the obstetrician, and perhaps the majority of us do obstetrics, the importance of this matter, in order that we may in turn persuade the expectant mother to take this step, then our efforts here today will not have been in vain.

RESECTION OF OBSTRUCTIONS AT THE VESICAL ORIFICE WITH MAXIMI-LIAN STERN RESECTOSCOPE

By T. M. Davis, M. D., Greenville, S. C.

Since 1874 when Bottini first introduced his cautery operation for removing obstructions at the vesical orifice, it has been the endeavor of Urologists to devise a minor surgical proceedure for removing obstructions at the vesical orifice in order to replace the more serious major operations.

Bottini's instrument did not meet with any degree of success until 1897 when Freudenberg presented a greatly improved instrument, this was later improved by Young who used it with considerable success for several years and only discontinued its use after a number of accidents. There was much to be desired, as there was no visualization of the operative field during the actual operation, this alone caused numerous operative errors and finally caused the proceedure to fall into disrepute.

Young in 1909 designed and began the use of his punch instrument which consists of an

*Read before the South Carolina Medical Association, Columbia, S. C. April 19, 1928.

endoscopic tube with a fenestrum on the convexity near the beak, with an inner tube sharpened on the end capable of excising any tissue projecting within the fenestrum when thrust into the sheath, hemorrhage was frequently considerable and difficult to control and at times requiring cystotomy to control it.

Young in 1911 introduced a cautery type of cutting blade for his punch sheath, this was not as successful as was hoped for as sloughing and secondary hemorrhage was encountered.

Caulk, Tolson and others have made improvements in the punch instrument, it however remains substantially the same, with the disadvantage of the simple endoscopic tube, with limited illumination and visualization of the pathology at the vesical neck before and during operative proceedures. In using the cautery punch the visualization during the actual operation when such is most desirable is impossible, in addition the use of the cautery current is far from ideal for various reasons either for cutting or the control of hemorrhage.

Caulk has however to be given great credit for the work he has done with his technique, which in his hand has yielded some excellent results. He states, 'that one is never justified in doing either a suprapubic or perineal section for removal of bars and contractures, this also applies to an increasing number of other conditions."

McCarthey several years ago and more recently Collings reported resections of vesical neck obstructions by means of Radiothermy, with this current Collings reported a series of resections of bars and contractures with excellent results, oil had to be used as the distending medium to prevent arcing and fulgurating effects.

The Wappler Electric Co., in cooperation with Collings developed a generating machine using the old spark gap principle with a damped spark which gave a current with a frequency of 1400,000 oscillations per second, this current when used with suitable electrodes through Parendoscope does very nice cutting of tissue under water. I have reported several cases resected with this equipment. The objections are that the cutting is too slow, con-

sumes too much time to allow of extensive resection which is necessary at times.

More recently Dr. Maximilian Stern in cooperation with the same company has developed a generating machine for generating a current of very high frequency and low voltage, using the Thermoionic Pliotron tubes for generating the frequency of oscillations. This current is peculiar in that it can be delivered in a continuous flow through a cutting loop under water and as it has no tendency to arc or jump across a gap makes it possible to employ a bi-polar instrument for its application, the absence of sparking eliminating the fulgurating effect with its subsequent sloughing and possible secondary hemorrhage.

This current is applied through an ingenious instrument called the Resectoscope, the component parts of which consist of a sheath with a fenestrum on its convexity five eighths inch in length, an obturator to aid in introduction, a For-Oblique telescope for observation, the working parts consist of a direct vision telescope, a light carrier, a water conduit and a cutting loop or active electrode, the sheath carries a receptacle for the indifferent current.

The loop requires special description, it is a small loop of Tungsten wire, o. 5 c. m. in diameter placed at right angles to a specially insulated shaft, which is connected to the instrument in such a manner as to be made to slide backward and forward within the fenestrum by means of a rack and pinion, this loop though apparently small, actually removes more tissue than its small size would indicate. The loop is situated just in front of the direct vision telescope and may be seen resting upon the tissue protruding into the fenestrum prior to its resection and may be observed throughout its entire excursion during the operative proceedure.

The exact method in which this current performs is not definitely understood, it is thought that the current jostles the molecules so violently by its rapid oscillation that it causes a rupture of the tissue cells. Biopsy of tissue removed shows slight possible dehydration, there is not any cellular charring, this enables an accurate pathological examination of the

tissue removed, which is not possible with any of the cautery punches.

The anesthetic of choice is sacral, this gives complete anesthesia of the operative field and urethra with relaxation allowing free movements of the instruments. I have resected one case with only instillation of 3% Tutocaine into the bladder and urethra without great discomfort to the patient. Stern also reports cases done with local anesthesia.

The operative technique is as follows: The sheath is introduced, the obturator withdrawn and the bladder irrigated until the medium returns clear, the bladder is then filled with 200 c. c. and the observation telescope is inserted. A careful study is made of the pathology present and the site and amount of tissue to be removed is determined. The telescope is replaced with the working parts, with all conducting cords attached, the tissue to be removed first is made to engage within the fenestrum, the loop will be seen resting upon this tissue, the current is turned on with a foot switch. In about five seconds bubbles will be seen arising from around the loop and a halo formed where the loop comes in contact with the tissues, the loop is slowly advanced the entire length of the fenestrum. This leaves a clear gutter with only slight surface discoloration if any, usually without any hemorrhage, sometimes a small artery will be severed which continues to bleed, this occurs more often in lateral lobes. I have been controlling this successfully by slightly searing the point with the loop. When this fails I connect with a Diathermy current using about 600 M. amperes and coagulate the point. This may also be applied with a Collings electrode which can be introduced through a special adapter I have designed. I have also used a cystoscope with a fulgurating electrode for the same purpose. This only coagulates the small vessel area and there is no danger of slough and secondary hemorrhage.

I have designed a double tube with dilatable bag near its tip, one of the tubes ending within the bag is for dilating the bag, the other is for drainage of urine, has multiple perforations distal to the bag. This tube can be inserted with a stylus or better through a straight endoscopic tube size 28 F. The

endoscopic tube then being withdrawn leaving the tube in situ. The bag is then filled with a predetermined quantity of some antiseptic fluid, traction is made upon the larger tube with a tripod arrangement, the dilated bag being drawn into the vesical orifice which it adequately plugs with control of hemorrhage.

I have had but one case with the need of this bag, one of my earlier cases resected with the Collings equipment. It has been reassuring however to know that one has the means at hand to cope with all emergencies. This tube was presented to the State Medical Meeting in 1927.

In median bars and contractures sufficient parallel sections are made in the floor of the sphincter to completely remove the obstruction. In lateral lobes which encroach upon the posterior urethra several sections in a continuous line are required. This is accomplished by beginning at the vesical aspect, making a section and having the proximal edge of the proceeding section in view at the distal end of the fenestrum at each succeeding section, remembering that three fourths inch is removed at each manipulation. In some cases several parallel lines are removed from one or both sides depending upon the amount of obstruction to be removed.

In malignant conditions this method is used as a palliative measure to relieve the obstruction and give the sufferer the ability to empty the bladder through the natural passage without the discomfort of the permanent suprapubic drainage. The amount of tissue to be removed will vary according to each individual case. It may be necessary to repeat the proceedure before the patient's demise. The simplicity and lack of discomfort following the resection greatly reassures this type of case.

In preparing patients for resections the usual proceedures are required for the usual type of obstruction, namely, forced fluids, alkalies when indicated, good general diet, retention catheter in some cases of complete retention and in rare instances suprapubic cystotomy to reduce the inflamed mucosa of the neck and posterior urethra.

In lateral lobe enlargements it is advisable to have given a course of deep roentgen ther-

apy consisting of a series of four exposures of from one half to a full unit. The former every other day and the latter twice weekly, the exposures are, a suprapubic, a sacral, a perineal and a rectal. The maximum results from these exposures are expected in about six weeks, when the resection is then carried out with a greater degree of success as the roentgen ray treatment reduces the inflammation of the mucosa as well as the prostate gland itself, allowing more prostatic tissue to engage in the fenestrum at the time of resection and not thickened mucous membrane.

Practically all cases are resected in the office and the majority are allowed to return to their home following the proceedure except in cases of rather large lateral lobes and those cases from out of town. These are sent to a hospital for from one to three days. Very rarely is a retention catheter left in situ, the patients can void in every case immediately following the resection. There is however an increasing difficulty after the first twentyfour hours which is never marked and gradually subsides in two or three days. This is due to the inflammatory reaction and subsequent oedema of the tissue. The patients are more cheerful without the catheter and being able to void once again aids in their speedy convalesence.

There is no doubt skepticism on the part of many as to the efficacy of resection relieving the obstructions at the vesical orifice. Young, Caulk and Stern have been instrumental in demonstrating the fact that a hypertrophied prostate gland can be influenced to retrogressive changes. Caulk has repeatedly reported marked reduction in the size of the gland following resection of the neck and lateral lobes. All operators familiar with the two stage prostatectomy know of the marked shrinkage of the large prostates which regularly occur in the interval between cystotomy and the subsequent enucleation.

Stern has called attention to the pathological work of Greene, Brooks, Ciechanawiski, Tannenbaum, Fisher, Ewing and others in support of the theory that the prostatic enlargement is for the most part an inflammatory one and not a true hypertrophy. The results obtained in the cases in which I have performed

resections have substantiated the above facts, that relief of the obstruction will cause the enlarged prostate to recede and almost resume normal size.

In conclusion: Stern has presented a most remarkable instrument for removing obstructions at the vesical orifice, which is accurate, and not difficult to manipulate.

That benign prostatic hypertrophy is for the most part an inflammatory reaction and not a true hypertrophy, which produces a vicious circle when once difficulty in voiding begins.

The proceedure is a minor one as compared to the more radical major operations and can be successfully performed with sacral anesthesia.

Rectal palpation is only an aid in the diagnosis, is often very misleading as to the true conditions and it is impossible to obtain an accurate interpretation of conditions at the bladder neck without a cystoscopic examination which all obstructive cases should have.

Obstructions of the vesical orifice can be adequately relieved by resection with the Stern Resectoscopic equipment, and tissue removed can be pathologically studied for determination of malignancy.

In addition to the following cases I have resected six cases with the Collings Electrotome equipment. These were contractures, median bars, and one of a lateral lobe. All these were satisfactory and the patients are still comfortable.

Case 1. White M. age 63. median bar moderate size, three ounces residual, voids four times nightly, about every hour daily, frequently has much difficulty in starting with considerable discomfort. Resection making five sections through the median bar completely removed obstruction. Patient voids about every three hours, no residual, does not void at night.

Case 2. Black M. age 67, median bar and left lateral fibrous type, six ounces residual, voids six times night, every hour daily, painful and difficult to start. Resected bar and lateral lobe, four sections in median bar, two parallel lines of three sections in left lateral. No residual voids once nightly and about every two and half hours daily.

Case 3. W. M. age 47, contracture of sphincter, two ounces residual, difficulty in starting, with pain, no night voiding, voids every two hours daily. Resection three sections in sphincter, no residual, no difficulty in starting, no pains, voids every four hours daily, no night voiding.

Case 4. W. M. age 67, bilateral lobes, eight ounces residual, had complete retention six months ago, voids every hour nightly and about every half hour daily, painful and delayed starting. Resection three parallel lines in each lobe, has one ounce residual, voids once nightly and about every two and half hours daily, no pain.

Case 5. W. M. age 64, median bar, has 14 ounces residual, being catheterized once daily, great difficulty in voiding and starting comes only in driblets, voids every half hour day and night. Cystoscopy caused complete retention. Resection four sections through median bar removed obstruction patient voids more freely than ever before, no pain no residual.

Case 6. B. M. age 60, median bar and right lateral fibrous type, colon bacillus cystitis, six ounces, residual, voids with difficulty and much pain every half hour night and day. Retention catheter for two weeks treating the cystitis. Resection three sections through bar, two parallel sections of three each on right lobe. Two weeks after cystitis cleared up no residual, voids freely once nightly every two hours during the day.

Case 7. W. M., age 59, right lateral lobe rather large. Residual six ounces, difficulty in starting, no pain, voids three times nightly every two hours daily. Resection, three parallel lines through right lobe, voids every four hours daily, no night voiding, residual one-half ounce.

Case 8. W. M., 65, median large and small right lateral, voids five times nightly, about every twenty minutes daily. Residual ten ounces, has great difficulty starting with much pain, any delay in voiding will cause almost complete retention, only voids in drops. Resection five sections of median bar and two parallel lines of two sections each in right lateral. One half ounce residual, voids once

nightly, voids every three and half hours daily, free from any discomfort.

Case 9. B. M., age 60, very large median lobe. Five ounces residual, voids five times nightly, every hour daily, slight colon bacillus cystitis, painful micturition. Resection, nine sections required to remove the obstruction of median lobe. No residual, voids once nightly, every three hours daily, no pain, cystitis clear.

Case 10. W. M., age 41, contracture sphincter, cyst of anterior prostatic commissure. No residual, voids four times nightly, about every hour daily, pain on starting. Resection, three sections through sphincter, cyst removed with diathermy, patient comfortable, no voiding at night, voids about every four hours, free from pain.

Case 11. B. M., age 58, large lateral lobes, has had several complete retention attacks, 7 ounces residual, colon bacillus cystitis. Voids four times nightly, and every four hours during the day. Resection, multiple sections in each lobe, voids freely, one ounce residual, voids about every three hours daily, not any at night.

Case 12. W. M., age 48, contracture with left lateral lobe, three ounces residual, voids seven times nightly, and about every half hour daily with much pain before voiding. Resection, several sections from the left lateral lobe and floor of the sphincter, result, no residual, voids about every four hours daily, not any at night, free from pain.

Case 13. W. M., age 71, malignancy right lateral lobe involved more than left, pain before and during voiding, voids every half hour daily and about six times at night, residual six ounces. Resection, many sections removed from the right and several from the left lobe, more tissue was removed than any preceeding cases as recurrence was expected. Result, patient voids about every two hours daily, free from pain, voids twice at night, about two ounces residual Roentgen therapy has been given, and radium used.

Case 14. W. M., age 63, moderate large median lobe, voids eight times at night, about every half hour daily, much pain before voiding, at times has great difficulty in starting, four ounces residual. Resection, the median

lobe was removed, patient voids freely about every three hours daily not any at night, no residual.

Case 15. B. M., age 66, large left lateral moderate right lateral. Acute retention of thirty-two ounces, has had to use catheter for two days, colon bacillus cystitis pus XXX. Resection, many sections removed from left and right lobes. Patient voided several hours after resection and has continued to void freely ever since, has one ounce residual and the cystitis has about cleared up.

Case 16. B. M., age 58, clinically malignancy of both lateral lobes, biopsy proved it to be adeno-carcinoma, patient has had retention for the past two weeks, catheterized once daily, residual thirty-six ounces, did not void at all night before resection, colon bacillus cystitis. Resection, many sections removed from both lateral lobes, also several sections from floor of sphincter as malignancy was expected. A larger amount of tissue than usual was removed. Patient voided several hours after operation and has voided freely ever since, free from pain before or after voiding, voids twice nightly and about every three hours daily.

Case 17. W. M., age 52, contracture vesical neck, there was no residual. The chief complaint was frequent and painful voiding, voids about every hour daily and nightly. Resected several sections from floor of sphincter, patient voids about every four hours daily not any at night, free from pain.

Case 18. W. M., age 53, moderate mediantobe, and bilateral laterals, has had a chronic cystitis and prostatitis of some years duration with occasional pyelitis. There was evidence of obstruction but no residual urine present, the stream was small and slow to start. Resection was done to relieve obstruction and establish better drainage. It has not been long enough to report results except that voiding is more freely without any pain.

DISCUSSION

Dr. W. R. Barron, Columbia: The method Dr. Davis has given us is a modification punch operation. I can not agree with Dr. Davis in advocating doing some of the things that he does through this instrument. I think the only justification for such an operation would be contracture of the vesical neck or to re-

lieve inoperable cases of malignant disease. We have to bear in mind that where there is a definite hypertrophy, and where the patient's condition permits surgery, the complete removal of the gland should always be done. Any temporizing method like resection with the Maximilian resectoscope, if the patient lives long enough, is more than apt to reform obstruction; and then a prostatectomy will have to be You have increased your hazard of incontinence very greatly and have made a difficult surgical procedure out of a fairly simple one. I repeat that my belief is that the only justification for the use of the method as outlined by Dr. Davis is for contracture of the vesical neck and for the removal of obstructing malignancy that is too far advanced for a radical operation.

Dr. J. J. Ravenel, Charleston: Dr. Davis's work constitutes real progress in the field of urology. If he has done nothing more than to bring this work before the minds of general practitioners his labors have certainly been worth while. Many advances have been made in the field of urology in the last few years but really none so brilliant as the simple cutting of the contracted bladder neck to relieve the obstruction. Patients who have soured upon the world because of years of real suffering are often miraculously transformed into smiling, grateful beings. The urinary stasis, which is the background of a long chain of most distressing urinary symptoms, has occupied the minds of urologists for many years. Dr. Davis, in his prelude, spoke of the various punch procedures which have been in vogue for many years. Among the causes of this urinary stasis may be mentioned contractures of the bladder neck and the so-called median-bar formations of the prostate. These changes are generally due to a long-continued inflammatory process which involves the vesical sphincter and that portion of the posterior urethra which Davis pointed out to you. There is a fibrous change taking place which renders the bladder neck more or less inelastic, leading to partial retention of urine. You can, then, readily see how a vicious circle is set up—the congestion increasing the fibrosis and the fibrosis increasing the residual urine and congestion. Excision of the bladder neck, in the treatment of urinary stasis, is primarily intended for those cases of contraction of the bladder neck or in the socalled median-bar formations spoken of, or in the fibrous prostates, which comprise about ten per cent, of the the cases of prostatism, or in the benign cases where there is some condition contraindicating general surgery, or in the malignancies of the prostate. Most men will agree, I am sure, that prostatectomy is the treatment of choice in adenomatous enlargements of the prostate, which constitute about ninety per cent. of prostatic enlargements. There is always some fibrosis in the adenomatous prostate and likewise always some adenoma in the fibrous prostate. I personally feel that in the adenomatous enlargement of the prostate complete enucleation is the procedure of choice. To my mind it is like comparing the old tonsillotomy and the modern tonsillectomy. Then, again, adenoma of the prostate is really a true tumor, and where a tumor exists my opinion is that complete removal is by far the best procedure.

I have enjoyed Dr. Davis's paper very much; it has been very interesting and I think very illuminating; and it has certainly been very stimulating.

Dr. Davis, closing the discussion: I myself was skeptical when I first heard of this instrument. I went to New York to see Dr. Stern's work and determine the accuracy of his reports. After seeing him operate with this instrument and after seeing cases that he had done two years previously I was convinced that this method is as accurate and far-reaching and the results are as accurate in the cases he resected as in the cases of removal of the prostate gland. I was myself, when I first started using this instrument, afraid to attack some of these problems; but since I have been using it more I have no hesitation in attacking any case sent to me. As to enucleating the prostate gland to remove it, the prostate gland is made up of three layers of cells. When you enucleate you leave two layers of cells, which may further enlarge. Quite often, in prostatectomies, there are still lobes left; I have seen one or two within six weeks after prostatectomy was done that were calling for relief because there was a gland there that was obstructing. The explanation of prostatic hypertrophy does not explain; calling it an adenomatous condition does not explain why, after suprapubic cystotomy, that gland shrinks down. You may have a prostate as big as your fist, do a suprapubic cystotomy, go in a week or ten days later, and it will be only as large as a hen's egg. If you had adenomatous tissue that gland would be as large ten days later as it was in the beginning. I have had this instrument six months and have resected eighteen cases with it. resected six with the Collings electrotome. All have been satisfactory, except one I did a few days ago; that patient has a little difficulty in voiding. As I stated, some of them have difficulty because of the inflammatory reaction that sets up within a few days after the opera-This is only transitory, and subsides in several days.

THE OCULAR AND RHINOLOGICAL MANIFESTATIONS OF ALLERGY

By Walter J. Bristow, M. D., Columbia, S. C.

The increasing interest shown in the condition which we now call allergy is evidenced by the large number of articles appearing in the various medical journals, and by the establishment of a considerable number of asthma and hay fever clinics at various medical centers over the country. Many new and interesting facts are being discovered not only about allergic conditions as they occur in patients, but about the sensitizing agents themselves.

Allergy, as we all know, is a condition of of the tissues or tissue juices in which they show a hypersensitive or anaphylactic reaction to certain substances; usually, but not always, a foreign protein. There is nearly always an hereditary factor involved, and it is seen frequently in people who have what we commonly term a "high strung or nervous temperament." Many cases are seen in members of the Jewish race. It seems to be a disease of civilization, hay fever among negroes is rare. The symptoms as shown in the eyes, nose, and throat are only a part of the reaction, which shows itself in the skin and mucous membranes in other parts of the body. And it makes no difference whether we call the condition conjunctivitis, hay fever, asthma, urticaria, or eczema, the fundamental biological abnormality is the same.

Asthma and hay fever are the two types of allergy which usually show nose, throat, and eye symptoms. In hay fever the eye symptoms are all due to the reaction of the conjunctiva to irritation, but it is not a true inflammation such as we see in infectious processes. Itching is a prominent and constant symptom, and may be severe enough at times to be described as burning. It is almost impossible for the hay fever victim to refrain from rubbing his eyes, which increases the lacrymation and redness. The swelling of the lids and conjunctiva is due to both a congestion and engorgement of the blood vessels, and an actual exudation of serum into the cel-

lular tissues. The edema of the mucous membrane of the eyes and nose is characteristic of the allergic reaction. The irritability of the nose in hay fever is due to the hypersensitive condition of the mucous membrane: resulting in profuse secretion of thin watery mucous, swelling, at times, to the point of occluding the nostrils. The hypersensitiveness of the nasal mucosa of many hay fever patients is present both in season and out of season. Frequently they indulge in paroxysms of sneezing from trivial causes which do not affect the ordinary person. In some of the cases the mere touching of the anterior tip of the middle turbinate bone with a cotton application is sufficient to produce an explosive and prolonged spell of sneezing. One of my patients who is a physician, claims to be able to tell a real Wilton rug or Wilton carpet as soon as he steps on it, by his sneezing reaction.

The cause of the nasal voice in hay fever is evident. Itching of the soft palate and roof of the mouth is complained of not infrequently.

In allergic asthma there are no particular eye symptoms, although some cases seem to develope an acute conjunctivitis during the asthmatic paroxysms. A careful examination of the nose frequently reveals some pathological condition. The most common finding is the presence of nasal polyps. Polyps are only a symptom, and their presence practically always means disease of the mucous membrane lining the cells of the ethmoid labyrinth. Infection of the frontal and maxillary sinuses are encountered, and cases of true bronchial asthma due to bacterial sensitivity have been relieved by ventilation and drainage of infected nasal accessory sinuses. spots in the mucous membrane of the nose which were referred to under hay fever, are also found in some cases of asthma. Chronic pharyngitis and chronic tonsillitis are seen in many cases of asthma. Their role in the etiology of allergic conditions is uncertain, although the factor of hypersensitivity to bacterial proteids must be considered in these conditions as well as in the cases of sinusitis.

It is interesting to observe just why allergic patients come to the eye and throat doctor.

^{*}Read before the Columbia Medical Society, October, 1928, as part of a symposium on asthma and hay fever.

Many people with beginning hay fever believe that they have some infection in the eyes, and come in with the statement that they have pink eye or sore eyes. Some of them think they have eye strain and come in with a view to getting glasses or to have their glasses changed. Itching of the eyes brings many to the oculist and usually they are only relieved by desensitization. Many people with beginning hay fever come to the rhinologist because they think they have a cold, some of them complain of a persistent cold. In some the presenting symptom is; frequent paroxysms of sneezing. A large number of people have heard the term "sinus disease," and it is not unusual for some one to come in

with a running nose and say that they are suffering from sinus disease, which upon careful examination turns out to be rhinological manifestation of allergy.

Case reports are not within the scope of this paper, but it is the consideration of individual cases which emphasizes the need of close cooperation among the oculist and rhinologist, the clinical pathologist, and the internist. The determination of the sensitizing agent should be done by one who is interested in diagnosis and who has the time to devote to these usually tedious examinations. The treatment other than symptomatic should be in the hands of the internist.

WOMAN'S AUXILIARY South Carolina Medical Association

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WOMAN'S AUXILLARY __EDITORIAL WESTERN YORK AND ROCK HILL AUXILIARIES ENTERTAINED BY YORK COUNTY MEDICAL ASSOCIATION

Greatly enjoyed as a general get together meeting and social affair, was the banquet at which the York County Medical Association entertained the Auxiliaries of Western York and Rock Hill, at the Andrew Jackson Hotel, November 8th.

The ball room, on the mezzanine floor, furnished the setting for this occasion, and here three tables were arranged in semi-rectangular effect and decorated with handsome chrysanthemums and other fall flowers.

Dr. W. G. Stevens, President of the York County Medical Association, presided over the meeting and gave the address of welcome. The response for the auxiliary was very appropriately made by Mrs. J. R. Miller, president of the Rock Hill Auxiliary. Following the address of welcome, Dr. B. Rhett Turnipseed of St. Johns Methodist Church led in prayer. Two lovely vocal selections were contributed by Miss Nelle Kinard, with accompaniment by Miss Ruth Stevenson. In introducing the singer, Dr. Stevens took occasion to mention the fact that she was a local contestant in the recent South Carolina Radio Voice Contest held in Charlotte, repeating the song, "Danny Boy" which she sang on that occasion. Inspiring and much enjoyed were talks by Mayor J. B. Johnson and Dr. B. Rhett Turnipseed.

After the serving of the three course dinner, Miss Ellis of the Musical Faculty of Winthrop College, gave a beautiful piano selection.

This was the first occasion of this kind ever staged by the York County Medical Association, but all present expressed such joy at meeting together that the organizations decided to make this an annual affair.

Lydia B. Simpson, Secretary Rock Hill, Medical Auxiliary.

REPORT SOUTH CAROLINA AUXILIARY TO SOUTHERN MEDICAL AUXILIARY, ASHEVILLE, N. C., NOVEMBER 13th

For the year 1927-28 thirteen Auxiliaries paid dues for 211 members, three members at large making a total of 214. Collected dues amounted to \$108.50.

From this fund the proper disbursements have been made for affiliated memberships with S. M. A. and A. M. A. and for running expenses.

The Auxiliary held its Annual Meeting in April, in Columbia, S. C., at which time the present Officers were elected.

An especial provision has been voted by South Carolina for the president to serve two years which has been found desirable.

Through the County Auxiliaries Social Service work has seemed to be the preference of members. This is carried on by meeting the especial needs of the communities and by giving assistance in National, State and local drives viz Red Cross, T. B. Seal Sale, etc. Frequently the Auxiliaries assume and conduct successful leadership.

Some relief work was done during the September floods in our State. The making of garments and other comforts for deprived families has proven a helpful social medium as well as a delight to the ideal doctors' wives who are ever accustomed to personal service.

The choice of undertakings left to local Auxiliaries gives a more intimate and wide-spread interest and stimulates more definite cooperation from all sources towards our general projects.

The outstanding work of South Carolina for the past two years has been the preliminary financing of a memorial to Dr. J. Marion Sims, a son of South Carolina and a surgeon of National fame deserved because of his pioneer measures in interest of womanhood's relief.

This memorial will assume the form of a marble bust to be placed on our State Capitol grounds at an approximate total cost of six thousand dollars. Through the energy of our past president. Mrs. H. M. Stuckey, and her organized assistants the amount has been collected and the work begun. Half this amount is appropriated by the State.

Smaller memorials of an abidingly serviceable type will be established over the state honoring doctors who have given long and helpful service. These will be planned and provided by the County Auxiliaries.

Charleston has set the pace in selecting a historic spring beautifully located, this they will keep in clean and pure condition that travellers in passing may enjoy its water.

Many minds and many plans, fostered by loving interest, characterize the work of the South Carolina Auxiliary.

Respectfully submitted, Mrs. Waller H. Nardin, President.

TO EACH AND ALL AUXILIARIES OF THE SOUTH CAROLINA MEDICAL ASSOCIATION

Dear Auxiliary:

Your State President has recently enjoyed the privilege of close association with the leaders in our organized work, during the Southern Medical Auxiliary Meeting Asheville.

Much that was delightful and inspiring l would like to share with you, that you, too, might better understand the purpose of our Auxiliary and be inspired to cooperate in the things it sponsors.

But since only personal contact would make this possible, I have chosen three things that I want to ask the interest and cooperation of each Auxiliary in undertaking.

Your splendid response to the appeal for our Sims Memorial, which is now underway, assures me that you can easily do these smaller things about to be suggested, and encourages me to believe that you, individually and as organizations, will enjoy trying to succeed with them.

The requests are as follows:

First: That each County Auxiliary select a Committee to begin the historical research work of collecting and compiling information about the doctors who have practiced and given service in your county as far back as information is available. Also, that you include some accounts of the earliest forms of medical practice in your locality, such as has often been done when licensed physicians were not to be had. For example, pioneer men and women who attempted to relieve suffering by the use of herbs and roots to be gathered in their vicinity, etc.

It is the intention of each State Auxiliary to prepare a historical scrap book to be exhibited in a contest at the next meeting of the Southern Medical Auxiliary, to be held in Miami. November 1929. We must rely upon the members for assistance; and, assuredly, we want our State to have one of the very best, if not the prize winner, among these books.

Second: That you endeavor to induce every doctor's wife in your county to have a complete physical examination. This can be arranged for privately or in groups, as the members prefer, reports to be sent to me not later than February 15th. Each Auxiliary is asked to keep a record of members examined and of examining physicians. Local awards should be made to the wives making most perfect score, and State award to the Auxiliary reporting highest number of examined members.

Third: That you plan and undertake some local project that will afford comfortable service to your community. Especially that you at all times be mindful and considerate of the families of your doctors in sickness or bereavement. In asking you to do these things, I am

hoping that their inexpensive simplicity will meet with your approval; and that you will cheerfully enter into uniform plans for our State undertakings.

Assuring you of my genuine appreciation

for whatever part you may feel inclined to assume, I am

Sincerely your President,

Mrs. W. H. Nardin, Anderson, S. C.

SOCIETY REPORTS

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REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SO-CIETY, HELD AT THE IMPERIAL HOTEL, MONDAY, OCTOBER 1, 1928.

The meeting was called to order by the Vice-President, Dr. W. S. Fewell, at 8:30 P. M., with about 40 members present.

The minutes of the last meeting were read and approved as read. ,

Reports of clinical cases were then called for. Dr. Davis reported 7 cases of bifurcated ureter.

Dr. Pollitzer reported a case of unrecognized diphtheria resulting in a post-diphtheritic paralysis. Dr. Pollitzer suggested that a second visit always be paid in all cases of sore throat.

Dr. Hugh Smith reported further on his case of diaphragmatic tic which had been controlled by section of one phrenic nerve. Dr. Smith stated that this operation completely arrested the tic and that it had not recurred.

Dr. C. O. Bates then read a very able paper on Blood Transfusions, first stating that it was once considered a very heroic operation. Before giving a transfusion it is very necessary to get the proper donor which is obtained only through correct blood typing. Horse serum administered to increase the clotting time has the tendency to interfere with the typing.

Dr. Bates then gave the indications for blood transfusion which are as follows: surgical shock, anaemia, septicaemia, possibly blood dyscrasia, haemorrhage which has occurred previous to operation from any cause, etc.

The indications for transfusion depend on the red blood count rather than on the haemoglobin estimations. Dr. Bates then stated that transfusion is of great value in prolonged septicaemia, especially in puerperal septicaemia, but that it was of little or no value in septicaemias due to Streptococcus Haemolyticus. Dr. Bates recommended the use of whole blood by the direct method and demonstrated the French apparatus which he uses in this work.

Discussed by Drs. Wilson, Kluttz, C. B. Earle, Anderson, Hugh Smith, Wilkinson, Hearin, W. S. Fewell, Pollitzer, Wyatt; closed by Dr. Bates.

Dr. C. W. Evatt then presented a very interesting paper, the subject of which was "Our

Duty to the Patient". Dr. Evatt stated that the patient should be the centre of all of the physician's thought and interest, and further added that a physician should make an attempt to prepare at least one scientific paper a year for presentation or publication in a reputable medical journal.

In order to render his patient the best that is in him, the physician should endeavor to vacation for at least one month each year in some medical centre where he might benefit from a variety of clinics.

In the attempt to establish a diagnosis the physician should resort to very accurate observation, a good history of the case both past and present, a complete physical examination with a reliable examination of the heart and lungs included in it, and further, Dr. Evatt deplored the fact that too few pelvic examinations were done. The essayist then suggested that we first do the best we could with our patients before getting consultation, and that we do not hesitate too long in calling in a consultant.

Fees charged patients should not be too small, but should be adequate enough to cause the patient to have more faith in his doctor. Discussed by Drs. Bruce, C. B. Earle, and Mauldin; closed by Dr. Evatt.

Dr. W. T. Brockman then introduced Dr. Fergusson, of Birmingham, Ala., who spoke briefly on the intramuscular injection of a weak HCl solution so as to give rise to a leukocytosis to combat numerous infections and allergies. Dr. Fergusson exhibited several before and after photographs of cases of lupus vulgaris, bubo and other cases which had been treated with this method.

There being no further business, the meeting adjourned.

Irving S. Barksdale, M. D., Secretary.

REGULAR MONTHLY MEETING OF THE GREENVILLE COUNTY MEDICAL SO-CIETY, HELD AT THE IMPERIAL HOTEL, NOVEMBER 5, 1928.

The meeting was called to order by the President, Dr. Johnston at 8:15 P. M., with 39 members present.

The minutes of the last meeting were read and approved as read.

Reports of clinical cases were then called for. Dr. Hearin reported a case of double vagina and cervix in a woman who had gone to term. Only one tube and ovary were present.

Dr. Sanders reported a case of tic in two women over 60 years of age. Extraction of the teeth had failed to arrest the tic. Opening and winding of the antrum effect a stoppage, and to this time there has been no recurrence. Dr. Sanders stated that the antra should be kept open as long as there is any tendency to drainage.

Dr. Davis reported a case of prostatic hypertrophy in which a very tenacious ball of mucus had formed in the bladder which embarrassed or even stopped the flow of urine from the bladder. All attempts at mechanical removal through the urethra failed. The ball of mucus was finally removed by the instillation of a 15 per cent solution of caroid into the bladder which was allowed to remain for 35 minutes.

President Johnston then called upon Dr. J. G. Murray, of Greenville, who presented a very interesting paper describing some original work he had done on the wards of the City Hospital in the treatment of cardio-renal-vascular disease. Dr. Murray first gave an excellent picture of the typical charity ward cardiac patient, and mentioned the vastness of the problem that these patients are to the medical profession. These studies consisted of observations carried out, not with one drug, but with three instead—one to strengthen and stimulate the heart in the form of large doses of digitalis, another to diminish the vascular hypertension in the form of citrin and the third to promote diuresis in the forms novasurol and ammonium chloride.

Dr. Murray stated that at first he gave only textbook doses of digitalis to one group of patients, whereas another group were used as controls. Very little effect if any was noted.

Large doses of digitalis in the form of the tincture were then resorted to, first ½ ounce of the tincture was administered followed by a dram of the same drug every 4 hours until digitalization had taken place. Dr. Murray further stated that citrin is of greater value in cases of uncomplicated vascular hypertension, but that it has its place as a vaso-dilator with other drugs in these very bad cases of cardio-renal-vascular disease.

As a diuretic, novasurol had a very good effect; also ammonium chloride was found to be of much value if administered in enteric coated capsules. Ammonium chloride in this series of 15 cases had a more consistent effect than novasurol.

Dr. Murray summarized his paper by suggesting the use of larger doses of digitalis, regular doses of citrin and one or both of the above

diuretics, namely novasurol and ammonium chloride.

Discussed by Drs. J. M. Fewell, Powe, W. S. Fewell, Hugh Smith, W. T. Brockman, and Hearin; closed by Dr. Murray.

President Johnson then called on Dr. George R. Wilkinson, who read a very informing paper on Renal Diabetes. The essayist first stated that it was very important to differentiate renal diabetes from the true diabetes mellitus. diabetes is characterized by glycosuria with hyperglycaemia, and by the absence of true diabetic symptoms, also by the presence of pentose in the urine instead of glucose. He further stated that renal diabetes should be suspected when there is a discrepancy between the amount of glucose in the blood and the amount found in the urine. The glucose tolerance test is also of value in differentiating the two types of glycosuria. Insulin therapy will also aid in diagnosis. Pentosuria has a tendency to occur in families, and the urine may give a positive sugar test on a starvation

Dr. Wilkinson then gave the criteria for renal diabetes, first, that the urine should not become sugar-free with insulin therapy, and second the amount of sugar in the Mosenthal Test should be within 0.2 per cent of each sample.

Discussed by Drs. Davis, Hugh Smith, W. S. Fewell and Kluttz; closed by Dr. Wilkinson.

Dr. Tyler commended the two essayists for their papers, and suggested that they be published in appropriate medical journals. Dr. Brown moved that Dr. Murray's and Dr. Wilkinson's papers be published at an early date; seconded and carried.

Dr. Davis announced the meeting of the State Urological Association in Greenville in about six months and invited the members of the Greenville County Society to attend the sessions.

There being no further business the Society adjourned to an excellent buffet supper served by the Hotel management.

Irving S. Barksdale, M. D., Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, NOVEMBER 13, 1928, AT 8:30 O'CLOCK.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Doctors Allen, A. E. Baker, Banov, Bowers, Burbage, Burn, Cain, Chamberlain, Jackson, McCrady, Maguire, Mitchell, Mood, W. H. Price, Rhame, R. B. Rhett, Richards, Taft, Waring, I. R. Wilson. (20).

Guest: Dr. R. H. Lanning, U. S. N.

The minutes of the meeting of October 23rd were read and confirmed.

The Secretary read a letter of application from Dr. Louis S. Miles. His application was referred to the Board of Censors.

Under Reports of Officers and Committees, Dr. G. McF. Mood, Chairman of the Board of Commissioners, presented the Annual Report of the Roper Hospital in pamphlet form, and earnestly urged the members to read and criticise the Report.

Dr. Mood also presented the following resolution, passed at the regular meeting of the Board of Commissioners held July 20, 1928:

"It was moved, seconded, and carried, that effective as of this date that members of the Medical Society of South Carolina, their wives, and dependent children, be granted a rate at the Riverside Infirmary of 50% of the regular price of the room occupied, but not below \$2.50 per day."

This resolution was put before the Society, and carried by a unanimous vote.

Under unfinished business, the President announced the appointment of the following committees:

Committee on Investigation of Charity Service Dr. J. W. Burn, Chairman; Dr. Edward Rutledge, Dr. F. G. Cain, Dr. O. B. Chamberlain, Dr. I. R. Wilson, Dr. K. M. Lynch.

Committee on Entertainment of State Medical Association

Dr. K. M. Lynch, Chairman; Dr. H. P. Jackson, Dr. W. A. Smith, Dr. J. W. Burn, Dr. J. H. Cannon, Dr. F. L. Parker, Dr. O. B. Chamberlain, Dr. T. E. Bowers, Dr. C. W. Kollock, Dr. A. E. Baker, Jr.

The Scientific Session was called at 9:00 P. M.

The first subject presented was, "The Right Rectus Incision in Appendicitis". This paper was read by Dr. Baker, who stressed the importance of this incision.

The Society then adjourned for five minutes, to welcome Dr. W. H. Price to the meeting, after his recent illness.

The next paper, "Complications of Appendicitis", was then read by Dr. F. G. Cain.

Dr. J. S. Rhame presented an interesting case of empyema of the gall bladder, the patient having had a gangrenos appendicitis three years previously.

Dr. J. S. Rhame also reported a case of perforative appendicitis, with symptoms very similar to renal colic.

There being no further business, the meeting adjourned.

W. Atmar Smith, M. D., Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, OCTOBER 23, 1928, AT 8:30 O'CLOCK.

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Doctors A. E. Baker, Jr., Banov, Beach, Boette, Buist, Burn, Byrnes, Cain, Cannon, Cathcart, Chamberlain, de Saussure, Finger, Jackson, F. B. Johnson, Kollock, McCrady, B. K. McInnes, Maguire, Martin, Mitchell, O'Driscoll, Pearlstine, Plowden, Prentiss, Prioleau, Richards, Rutledge, Scott, S. Simons, W. A. Smith, Sparkman, Speissegger, I. R. Wilson, R. Wilson. (35).

Guests: Doctors J. W. Kimbrough, G. B. Tayloe, and R. H. Lanning, of the United States Navy.

The minutes of the meeting of October 9th were read and confirmed.

Under Reports of Officers and Committees, the Librarian reported that the meeting of the Library Committee had been held, and that it was the unanimous opinion of this Committee that the valuable books belonging to this Society, which had been lent to the Surgeon General's library in Washington, for preservation, be secured and that this Society make provision for properly preserving these books in the Society's Hall. The Committee desired to make this as a recommendation to the Society. It was moved, seconded and carried that the report be adopted, and that the Committee have the books returned and make suitable provision for their care.

The Secretary read an invitation from the South Carolina Urological Association, inviting the Society to attend a meeting of this body on October 30th, at 8:00 P. M., at the Francis Marion Hotel.

Under Miscellaneous Business, Dr. R. S. Cathcart called the attention of the Society to the fact that the South Carolina Medical Association has been invited here for its annual meeting in April, and moved that a committee composed of the President, Secretary and eight others be appointed to arrange for this meeting. Seconded and carried.

Dr. J. W. Burn said that he had heard considerable criticism about the amount of charity work being done by the Roper Hospital and the Board of Health. He said he was uncertain as to the justice or injustice of the criticism, which he had heard. He thought the matter was of great importance to the medical profession, and deserved consideration. He moved that this Society appoint a committee of six to make a thorough investigation and report its findings to the Society. Seconded, carried.

Dr. Leon Banov discussed the advisability of permitting the dairies in Charleston to put certified milk on the market. He said that the city regulations do not permit certified milk, but would permit a double A grade, which complied in every way to the certified product, except that pasteurization was required. He stated that he wanted the advice and backing of the Society in this matter and moved that it be referred to the Committee on Public Health and Legislation for investigation and report. Seconded, carried.

The Scientific Session was called at 9:00 P. M.
The President extended the privileges of the floor of the Society to Doctors Kimbrough and

Tayloe, of the U. S. Navy, who were guests of

the Society.

A surgical case report was made by Dr. A. J. Buist on a case of appendectomy followed by infection of the gas bacillus. The report was discussed by Drs. McCrady, Lanning, Maguire and Cannon, Dr. Buist closing.

A medical case report was made by Dr. Robert Wilson. Dr. Wilson presented the history and physical examination of a cardio vascular renal case with cerebral complications. This was discussed by Dr. Chamberlain. At the request of Dr. Wilson, Dr. Plowden presented the pathological findings which proved the case to be one of cerebral embolism.

The paper of the evening was read by Dr. J. H. Cannon, on "The Modern Heart Clinic". This paper was discussed by Doctor Robert Wilson, who lauded Dr. Cannon for the splendid work he is doing.

There being no further business, the meeting adjourned.

W. Atmar Smith, M. D., Secretary.

THE ANNUAL MEETING OF CHESTERFIELD COUNTY MEDICAL SOCIETY

Beginning at 5 P. M., on 22nd of November, 1928, the Chesterfield County Medical Society held its annual meeting in Cheraw and was attended by about 75 doctors from South Carolina, North Carolina, and Virginia.

This was one of the best Medical Meetings ever held in this section of the state, and the scientific papers which were given by the outstanding physicians of the three states were considered far above the average.

At 5 P. M. Dr. J. S. Gaskins, President, opened the meeting with the address of welcome from the society, then turned the meeting over to R. L. Gardner, the chairman.

Invocation by Dr. A. H. McArn.

Address of Welcome by R. A. Rouse, Mayor.

Response by Dr. R. L. Gardner.

The first paper was by Dr. C. W. Kelluck, Charleston, who was introduced by Dr. C. A. Bolt, Chesterfield. The discussion was lead by Dr. William Egleston, Hartsville, and Dr. Mobley, of Florence.

The next paper was by Dr. McGuire, of Rich-

mond, Va., who was introduced by Dr. O. H. Purvis, of Cheraw. The discussion was lead by Dr. T. H. McLeod, Florence.

At this time the meeting adjourned to the Banquet Hall, where a most elaborate dinner was served by the American Legion Auxiliary. During the dinner a most delightful Musical program was rendered by Mrs. J. C. Crawford, Mrs. Muldrow, and Dr. G. A. Bunch.

Dr. R. J. Coney served as toastmaster and the following gentlemen were introduced as after dinner speakers:

Mr. John D. Nock, Com. A. L. Post.

Mr. L. A. Kerr, President Chamber of Commerce.

Mr. L. A. Meiklejohn, President Kiwanis Club. Hon. W. F. Stevenson, Congressman,

These gentlemen extended a very hearty welcome to the visiting doctors and everyone present seemed to get the spirit of good fellowship that Cheraw always extends on such occasions.

At 8 o'clock the scientific program was resumed and Dr. F. Eugene Zemp, of Columbia, was introduced by Dr. D. C. Griggs. Dr. Zemp presented Dr. J. H. Gibbs' papers, who at the last moment could not attend. The discussion on this paper was lead by Dr. William Allen, of Charlotte, N. C. The next speaker, Dr. J. Buren Sidbury of Wilmington, N. C., was introduced by R. L. Gardner. The discussion on this paper was lead by Drs. Salders and Price with others.

Every one who attended this meeting was enthusiastic over the great benefit derived and Dr. Gardner extended an invitation in behalf of the Chesterfield County Medical society to meet with us again next year.

R. J. Coney, Secretary.

PROCEEDINGS OF THE REGULAR MEETING OF THE MEDICAL SOCIETY OF SOUTH CAROLINA, HELD AT ROPER HOSPITAL, TUESDAY EVENING, NOVEMBER 27, 1928, AT 8:30 O'CLOCK,

The meeting was called to order by the President, Dr. Henry P. Jackson.

Present: Doctors Allen, A. E. Baker, Jr., B. R. Baker, Banov, Beach, Boette, Burn, Byrnes, Cain, Cannon, Chamberlain, Finger, Jackson, F. B. Johnson, Kollock, McCrady, Maguire, Mitchell, Mood, O'Driscoll, E. F. Parker, Phillips, Plowden, W. H. Price, Prioleau, W. M. Rhett, W. P. Rhett, Richards, Rutledge, W. A. Smith, Speissegger, Taft, Waring, Wild, I. R. Wilson. (35).

Guests: Dr. A. P. Morton, U. S. N., and Dr. R. H. Lanning, U. S. N.

The minutes of the meeting of November 13th were read and confirmed.

The Secretary presented the name of Dr. Louis S. Miles, whose application had been favorably reported upon by the Board of Censors, for elec-

tion to membership. The President appointed tellers who collected the ballots, and Dr. Miles was found to have been unanimously elected a member of the Society. The President directed the Secretary to notify Dr. Miles to this effect, and to request that he be present at the next meeting in order that he may sign the constitution.

The Secretary read a communication from Dr. J. W. Burn, announcing that he was no longer limiting his practise to Medicine and Obstetrics, but would go back to his old practice as General Practitioner.

Dr. W. C. O'Driscoll, Librarian, reported that he had held a meeting of the Library Committee and that, pursuant to instructions of this Society, a letter was sent to the Surgeon General requesting the return of the old books of this Society which are now being preserved in the Surgeon General's library.

Dr. W. M. Rhett, Chairman of the Committee on Public Health and Legislation, made the following report in reference to the matter of certified milk, which had been reported to his committee for investigation and report:

Charleston, S. C., November 26, 1928. Medical Society of South Carolina:

The committee on Public Health and Legislation wishes to make the following report to the Society in regard to the question of the advisability of permitting a "double A" classification on milk produced in accordance with the standard requirements of Certified Milk.

The committee finds that at the present time a number of dairies are marketing what purports to be two grades of milk: (1) "Grade A Milk," (2) "Grade A Milk for Babies," and that they are charging a premium of several cents per quart for the latter product. At present there is no check on that product which assures its being superior in any way to the ordinary Grade A Milk.

The committee feels that it is highly desirable that encouragement should be given those dairymen who are able and willing to produce a Certified Milk, which when pasteurized according to city law, would be given a grade higher than A, to distinguish it from the ordinary product. The committee visited one of the dairies with Dr. Banov, which we regard as being able to produce milk of this type.

We therefore recommend that the Medical Society appoint a Medical Milk Commission as outlined by the American Association of Medical Milk Commissions, a copy of whose manual is herewith enclosed. This commission will act under the auspices and for the Medical Society to encourage the production of milk of the highest possible standards of purity. The composition of this commission and its duties are outlined very clearly in this manual.

We believe that a commission of this sort, to pass on the grading of milk entering the city, is essential to a proper knowledge on the part of the public as to the product that they are buying. We also believe that it will stimulate more of the dairies to improve their milk in an effort to get in the higher classification, with its added premium.

Dr. Wythe M. Rhett, Dr. F. B. Johnson.

It was moved and seconded that this report be adopted and that the Medical Milk Commission be appointed as recommended in the report, and that Dr. W. M. Rhett be made Chairman, other members to be appointed. This motion was carried.

The President announced that it was in order at this meeting to nominate officers for the ensuing year. The following were nominated:

For Secretary-Dr. W. Atmar Smith.

For Treasurer-Dr. J. H. Cannon.

For Librarian-Dr. W. C. O'Driscoll.

For Member of Board of Commissioners—Dr. W. Atmar Smith.

For Member of Board of Censors-Dr. C. W. Kollock.

For Member of Board of Finance (9 years)—Dr. E. F. Parker.

For Delegate to State Medical Association (5 years)—Dr. J. S. Rhame.

For Alternates—Dr. M. W. Beach, Dr. W. Atmar Smith, Dr. J. E. Smith, Dr. D. L. Maguire, Dr. J. J. Ravenel.

Dr. R. B. Taft announced that he had succeeded in obtaining for an assistant Dr. J. P. Palmer, of Atlanta, Georgia.

The Scientific Session was called at 9:00 P. M.

Under case reports, Dr. J. A. Finger presented a case of a large tumor of the abdomen in a man. The diagnostic possibilities were discussed by Doctors Prioleau, Plowden, and Lanning.

Dr. R. L. McCrady and Dr. W. Atmar Smith reported a case of pulmonary embolism following delivery.

Dr. J. H. Cannon presented a case of combined nephritis and nephrosis. It was discussed by Dr. F. B. Johnson.

The paper of the evening was read by Dr. F. C. Cain, on "Carcinoma of the Cervix", Dr. R. B. Taft discussing the treatment of this condition by radium. Dr. Taft showed lantern slides. This was discussed by Doctors McCrady and Plowden, Dr. Cain and Dr. Taft closing.

There being no further business, the meeting adjourned.

W. Atmar Smith, M. D., Secretary.

PROGRAM OF THE CLARENDON COUNTY MEDICAL SOCIETY, FRIDAY, DECEMBER 14, 1928.

Dinner served at the Summerton Hotel, Five P. M.

Speeches in dining hall immediately after dinner by Dr. J. A. Mood and Dr. Richard Furman, of Sumter, S. C.

Papers by Dr. Dunn and Dr. J. A. Mood, of Sumter, S. C.

Papers by Dr. James McLeod and Major Brice, of Florence, S. C.

Papers by Dr. T. J. Davis, of Manning, S. C., read at the medical meeting after the dinner.

> Dr. W. H. Carrigan, Pres. Dr. L. C. Stukes, Sec. and Treas.

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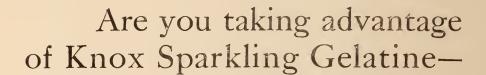
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BOOK REVIEWS

- THE MEDICAL CLINICS OF NORTH AMERICA. (Issued serially, one number every month.) Volume 12, Number 3. (New York number, November, 1928). Octavo of 334 pages with 64 illustrations. Per Clinic year, July, 1928 to May, 1929. Paper, \$12,00; Cloth, \$16.00 Net. Philadelphia and London: W. B. Saunders Company, 1928.
- THE SURGICAL CLINICS OF NORTH AMERICA. (Issued serially, one number every other month.) Volume 8, No. 6. (Pacific Coast Surgical Association Number—December, 1928). 277 pages with 118 illustrations, including Complete Index to volume 8. Per Clinic year (February, 1928 to December, 1928.) Paper \$12.00; Cloth, \$16,00. Philadelphia and London. This volume is of peculiar interest in that it is dedicated to that great master, John Hunter, the founder of modern scientific surgery and a student of immortal fame.
- A TEXT-BOOK OF PHARMACOLOGY AND THERAPEUTICS. By Hugh A. McGuigan, M. D. Professor of Pharmacology and Therapeutics, University of Illinois, School of Medicine, Chicago. Octavo volume of 660 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$6.00 net.
- A TEXT-BOOK OF SURGERY. By W. Wayne Babcock, M. D., F. A. C. S., Professor of Surgery and of Clinical Surgery in the Temple University, Philadelphia; Surgeon of the Samaritan Hospital and to the American Hospital for Diseases of the Stomach. Octavo of 1367 pages with 1050 illustrations, 9 of them in colors. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$10.00 net.
- PROBLEMS IN SURGERY. University of Washington Graduate Medical Lectures for 1927. By George W. Crile, M. D., edited by Amy F. Rowland. Octavo volume of 171 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$4.00 net.

- AN INTRODUCTION TO EXPERIMENTAL PHARMACOLOGY. By Torald Sollman, M. D., Professor of Pharmacology and Materia Medica at Western Reserve University, Cleveland, and Paul J. Hanzlik, M. D., Professor of Pharmacology at Stanford University, San Francisco, Calif. Octavo volume of 321 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$4.25 net.
- PREVENTIVE MEDICINE. By Mark F. Boyd, M. D., C. P. H., Member of Regular Field Staff, International Health Division of Rockefeller Foundation; formerly Professor of Bacteriology and Preventive Medicine in the Medical Department of the University of Texas. Third Edition, Revised. Octavo volume of 475 pages with 151 illustrations. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$4.50 net.
- THE MEDICAL CLINICS OF NORTH AMERICA. (Issued serially, one number every other month.) Volume XII, Number II. (Nebraska University Number, September, 1928.) Octavo of 254 pages with 40 illustrations. Per Clinic year, July, 1928 to May, 1929. Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London: W. B. Saunders Company, 1928.
- THE SURGICAL CLINICS OF NORTH AMERICA. (Issued serially, one number every other month.) Volume 8, number 5. (New York Number—October, 1928) 293 pages with 141 illustrations. Per Clinic year (February, 1928 to December, 1928.) Paper \$12.00; Cloth, \$16.00. W. B. Saunders Company, Philadelphia and London.
- SYPHILIS ACQUIRED AND HEREDOSYPHI-LIS. By Charles C. Dennie, B. S., M. D. Assistant Professor of Dermatology and Syphilology, University of Kansas School of Medicine; Chief of Heredosyphilitic Clinic, Children's Mercy Hospital; Chief of Syphili-

tic Clinic, Kansas City General Hospital; Dermatologist and Syphilologist, St. Luke's Research and St. Mary's Hospital. Member of the American Dermatological Association. Harper & Brothers, Publishers, 1928. New York and London. This is one of the most practical handbooks on the subject we have had the pleasure of reading. It has the advantage of beng a real monograph and therefore an expression from one who has had a large experience. The author has made every effort to keep in mind the active practitioner and thus has produced a handy reference book admirably bound and printed.



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